

MAY 1951

GALAXY

Science Fiction

Galaxy

SCIENCE FICTION

MAY 1951

35¢

ANC



MARS CHILD By Cyril Judd

Galaxy

SCIENCE FICTION

Editor-in-Chief
VERA CERUTI

Editor.....H. L. GOLD

Art Director
W. L. VAN DER POEL

Advertising Manager
GENE MARTINAT



Cover by
CHASLEY BONESTELL
Illustrating
MARS CHILD

GALAXY Science Fiction is published monthly by World Editions, Inc. Main offices: 185 West 40th St., New York 18, N. Y. 10018 per copy. Subscription: (12 copies) \$1.50 per year in the United States, Canada, Mexico, South and Central America and U.S. Possessions. Elsewhere \$4.00. Entered as second-class matter at the Post Office, New York, N. Y. Copyright 1951, by World Editions, Inc. President: George A. Goggin, Vice-President: Marcus Lumb, Secretary and Treasurer: Anne Swered. All rights, including translation, reserved. All material submitted must be accompanied by self-addressed stamped envelope. The publisher assumes no responsibility for unsolicited material. All stories printed in this magazine are fiction, and any similarity between characters and actual persons is coincidental.



May, 1951

Vol. 2, No. 2

CONTENTS

BOOK LENGTH SERIAL—Installment 1

MARS CHILD
by Cyril Judd 18

NOVELETS

HOSTESS
by Isaac Asimov 86

ASK ME ANYTHING
by Damon Knight 132

SHORT STORIES

BRIDGE CROSSING
by Dave Dryfoos 5

MAN OF DESTINY
by John Christopher 124

ARTICLE

AFRICA'S MYSTERIOUS MAMMAL
by Willy Ley 76

FEATURES

EDITORIAL
by H. L. Gold 2

GALAXY'S FIVE STAR SHELF
by Groff Conklin 83

Next issue at your newsstand about May 15th

Printed in the U. S. A.

Reg. U. S. Pat. Off.

Science and Fantasy Fiction:

-CURRENT NEW BOOKS-

FREE: With order for at least \$3.00: Your choice of any ONE of the following:

1. The current issue of "New Worlds"—British Science Fiction magazine
2. The current issue of: "Science-Fantasy"—British Science Fiction magazine
3. The Metal Monster, by A. Merritt—Pocket Book Edition
4. The Man Who Sold the Moon, by Robert A. Heinlein—Pocket Book Edition
5. Princess of the Atom, by Ray Cummings—Pocket Book Edition

FREE: With orders for at least \$10.00: Your choice of any ONE of the following Cloth Bound books:

1. The Shards Goddess, by R. F. J. Richards. Word of a lost day in Tibet
2. The Shadow Girl, by Ray Cummings. Time Travel Novel
3. The Time Machine, by H. G. Wells. De Luxe Bound Edition. Illustrated by W. A. Delwood
4. Pilgrims Through Space & Time, by J. O. Bailey. A History of Science Fiction

1. Far Boundaries, Ed. by August W. Derleth. Science-Fiction Anthology..... 2.50	21. Cosmic Engineers, by C. D. Simak..... 2.50
2. World of Wonder, Ed. by Fletcher Pratt. Science Fiction Anthology..... 2.50	22. The Hidden Universe, by Ralph M. Parker..... 2.50
3. Durable Worlds of Science Fiction, Ed. by Geoff Corbille. Science Fiction Anthology..... 2.50	23. Doorways to Space, by Buck Webb..... 2.50
4. Every Man's Book of Science Fiction, Ed. by Donald A. Wollheim. Science Fiction Anthology..... 2.75	24. The Undiscovered Princess, by L. S. De Camp..... 2.50
5. Eight into Infinity, Ed. by Martin Greenberg. S. F. Anthology..... 2.50	25. Green House, by L. S. De Camp..... 2.50
6. The Big Book of Science Fiction, Ed. by Geoff Corbille. Science Fiction Anthology..... 3.00	26. Incomplete Machinery, by L. S. De Camp..... 2.50
7. Adventures in Tomorrow, Ed. by Kenneth Cresson. S. F. Anthology..... 2.50	27. Castle of Iron, by L. S. De Camp..... 2.50
8. The Stars, Like Dust, by Isaac Asimov..... 2.50	28. Careful Secretary, by Eric F. Ross..... 2.75
9. I, Robot, by Isaac Asimov..... 2.50	29. The Incredible Planet, by J. W. Campbell..... 2.50
10. Solstice T-86, by Theodore St. John..... 2.75	30. The Moon Is Hell, The Elder Gods, by J. W. Campbell. (In one volume)..... 3.00
11. Day of the Tenth, by John Wyndham..... 2.75	31. Brothers in the Mirror, by A. Merritt..... 2.50
12. The Illustrated Man, by Ray Bradbury..... 2.75	32. The Ship of Ishtar, by A. Merritt..... 2.50
13. The Martian Chronicles, by Ray Bradbury..... 2.50	33. A Enemy There Was, by Lewis Padgett. (Short Stories)..... 2.50
14. Beyond Infinity, by Robert S. Carr..... 2.75	34. Galactic Patrol, by E. E. Smith..... 2.50
15. Renaissance, by Raymond F. Jones..... 2.75	35. First Losses, by E. E. Smith..... 2.50
16. The Teymader & Others, by R. F. Jones..... 2.50	36. Shogek of Etern, by E. E. Smith. (All E. E. Smith books in stock.)
17. Babylon's Island, by Jack Williamson..... 2.50	37. Voyage of the Space Beak, by A. E. Van Vogt..... 2.50
18. The Countess, One Against the London, by Jack Williamson. (In one volume)..... 2.50	38. The House That Would Kill, by A. E. Van Vogt..... 2.50
19. Out At World's End, by Edmund Hamilton..... 2.75	39. Spout on My Head, by Frederic Brown. (Short Stories)..... 2.50
20. Time & Again, by C. D. Simak. (Book of, of "Time Quarry")..... 2.50	40. Killman of the Dragon, by Stanley Mullen..... 2.50
	41. Complete Short Stories by H. G. Wells. (Over 1,000 pages)..... 2.50
	42. Seven Famous Novels of Wells. (7 complete science fiction books)..... 2.50
	43. The Iron Star, by John Thomas..... 2.50
	44. The Demon's Mirror, by James Wallington..... 2.50

And many more! We carry a full line of all current American and British Science and Fantasy Fiction, as well as a large stock of "out-of-print" items. Back issues of science fiction magazines available. Drop in and pay us a personal visit! Open Wednesday evenings until 4-40 P.M., Open Monday through Saturday until 6:30 P.M.

Bank by Check or Money Order. No C.O.D. orders accepted.

STEPHEN'S BOOK SERVICE

45 FOURTH AVENUE (Corner 9th St.)
NEW YORK 3, N. Y. (Phone GAlerney 3-4294)

Looking Backward

THE rating of stories in individual issues of a magazine seems to me a very faulty way to determine their value. However, our writers have pressed hard for it and they must, of course, be kept happy. Every half year, therefore, *GALAXY* will sum up the readers' votes . . . plus my comments.

Two exceptions should be made, I think—serials and articles. The only fair way to rate these is against each other, and most readers seem to share this opinion. Ignoring this common sense practice would create an artificial result.

Starting with Vol. 1, No. 1, then, here is how our readers rate *GALAXY* issue by issue.

• *October, 1950*: 1. The Stars Are the Styx, Theodore Sturgeon; 2. Contagion, Katherine MacLern; 3. The Last Martian, Fredric Brown; 4. Later Than You Think, Fritz Leiber; 5. Darwinian Pool Room, Isaac Asimov; 6. Third from the Sun, Richard Matheson.

There's not much doubt that the

two novelets headed the issue. The rest of the stories, though, suffer because of an absurd situation: only novelets and short-shorts were to be found at the time. These stories should have been used in separate issues, and would have been if longer ones had been available.

Selected for book reprint from this issue: The Stars Are the Styx, Contagion, The Last Martian, Later Than You Think and, naturally, Time Quarry, which ran in this and the next two issues.

• *November, 1950*: 1. To Serve Man, Damon Knight; 2. Misbegotten Missionary, Isaac Asimov; 3. Honeymoon in Hell, Fredric Brown; 4. Transfer Point, Anthony Boucher; 5. Coming Attraction, Fritz Leiber.

If the distances between the first four items are measured micro-metrically, these ratings are proper enough. Polled privately, however, the writers of these stories gave Coming Attraction first place, while some of our readers attacked it as "degenerate," mistaking a

terrifyingly clear warning for approval.

For book reprint: To Serve Man, Transfer Point, Coming Attraction. Negotiations are also going on for Honeymoon in Hell and Mosboughten Missionary. If they are concluded, *every item in this issue will be published in book form*, including Lands of Yesterday, that month's article by L. Sprague de Camp.

• *December, 1950*: 1. Second Night of Summer, James H. Schmitz; 2. Judas Ram, Sam Merwin, Jr.; 3. The Waker Dreams, Richard Matheson; 4. A Stone and a Spear, Raymond F. Jones; 5. Jaywalker, Ross Rocklynne.

The situation here was the reverse of October's: plenty of shorts, a dearth of novelets and short-stories. Both novelets were fully acceptable and certainly nothing to be ashamed of, but I would have preferred less traditional themes. The shorts, on the other hand, reflected the evolving GALAXY policy.

For book reprint: Second Night of Summer, Judas Ram.

• *January, 1951*: 1. Rule of Three, Theodore Sturgeon; 2. The Reluctant Heroes, Frank M. Robinson; 3. Susceptibility, John D. MacDonald; 4. Dark Interlude, Fredric Brown and Mack Reynolds; 5. Made to Measure, Wm. Campbell Gault.

Dark Interlude, like Coming Attraction, was misinterpreted by a number of readers. Far from pro-

moting race prejudice, the intent was exactly the opposite. This is, of course, the danger in using irony.

For book reprint: Rule of Three, Dark Interlude, and Tyrann, which ran in this issue and the next two.

• *February, 1951*: 1. The Fireman, Ray Bradbury; 2. Second Childhood, Clifford D. Simak; 3. . . . And It Comes out Here, Lester del Rey; 4. Two Weeks in August, Frank M. Robinson; 5. The Protector, Betty Curtis.

Here is a prime example of how editorial balance can ruin a story's rating; these light shorts were deliberately selected to weigh against the shattering emotion of The Fireman and Second Childhood.

• *March, 1951*: 1. The Wind Between the Worlds, Lester del Rey; 2. Good Night, Mr. James, Clifford D. Simak; 3. Socrates, John Christopher; 4. The Other Now, Murray Leinster.

From the editorial point of view, this issue shapes up somewhat differently. TWBTW is a strong science problem story; GNMJ is suspense; both are balanced by the shorts, which are human interest. It is too soon for anthologists to have hit these two issues so only GNMJ has been definitely scheduled for book reprint thus far.

On the whole, Vol. 1 shows a steady growth *when viewed as a unit*. The first two issues of Vol. 2 should indicate that this growth has, if anything, accelerated.

—H. L. GOLD

NEWS!

The inevitable union of Science and the Imagination finally established in a book that changes our conception of the universe as radically as it was revised by Newton and Einstein.

Living, as we do, at the bottom of the atmosphere, we are really at the core, not, as we thought, at the top of the world. Creation stems from us. The stars, planets, moons, comets and other heavenly bodies are the Earth's electronic accompaniment. Each performs functions in it as vital as those of our eyes and hands.

Until the appearance of this book

Science-Fiction Writers and Their Millions of Readers

have been like sailors at sea without compass or even a steering-wheel. Samuel Rath's *The Peep-Hole of the Present*—introduced by Sir Arthur Eddington of the University of Cambridge—has restored them to their rightful domain. They can now probe wider, enjoy more deeply.

DO YOU KNOW THAT:

the earth is not one of the
best playthings in the
night-sky?

the law of gravity is
not what you've been
taught it is?

light has no
velocity?

THE ASTONISHING PART

is that the book is so simply written, you
don't need more than a public-school edu-
cation to read and understand it.

There is drama in the book as well as
simplicity. You become the witness to a
great revolution in ideas—a revolution
which brings the new principles of
physics in line with personal con-
duct, and individual human
morals. The world be-
comes man's again; as it
must have been meant
to be.

To prove how sure we
are that you'll want to
keep this wonderful book
once it's in your hands we'll
be pleased—if you order by
means of the coupon below—to
let you

READ IT
AT OUR EXPENSE



Under-
standing
is the only
badge of nobility
that time does not
 tarnish.

Samuel Rath

The
\$5 edition
ONLY
\$1.98

WISDOM BOOKS Dept. C-1
119 Lafayette St., New York 13, N.Y.

Gentlemen: I enclose \$1.98 for the \$5
edition of *The Peep-Hole of the Present*.
I may return it for full credit if I decide
not to keep it.

NAME

ADDRESS

CITY ZONE STATE

Send C.O.D.

Bridge Crossing



BY DAVE DRYFOOS

He knew the city was organized for his individual defense, for it had been that way since he was born. But who was his enemy?

IN 1849, the mist that sometimes rolled through the Golden Gate was known as fog. In 2149, it had become far more frequent, and was known as smog. By 2349, it was fog again.

But tonight there was smoke mixed with the fog. Roddie could

smell it. Somewhere in the forested ruins, fire was burning.

He wasn't worried. The small blaze that smoldered behind him on the cracked concrete floor had consumed everything burnable within blocks; what remained of the gutted concrete office building

Illustrated by HARRISON

from which he peered was fire-proof.

But Roddie was himself aflame with anger. As always when Invaders broke in from the north, he'd been left behind with his nurse, Molly, while the soldiers went out to fight.

And nowadays Molly's presence wasn't the comfort it used to be. He felt almost ready to jump out of his skin, the way she rocked and knitted in that grating ruined chair, saying over and over again, "The soldiers don't *want* little boys. The soldiers don't *want* little boys. The soldiers don't—"

"I'm *not* a little boy!" Roddie suddenly shouted. "I'm full-grown and I've never even *seen* an Invader. Why won't you let me go and fight?"

Fiercely he crossed the bare, gritty floor and shook Molly's shoulder. She rattled under his jarring hand, and abruptly changed the subject.

"A is for Atom, B is for Bomb, C is for Corpse—" she chanted.

Roddie reached into her shapeless dress and pinched. Lately that had helped her over these spells. But this time, though it stopped the kindergarten song, the treatment only started something worse.

"Wazzums hungry?" Molly cooed, still rocking.

Utterly disgusted, Roddie ripped her head off her neck.

It was a completely futile gesture. The complicated mind that had

cared for him and taught him speech and the alphabet hadn't made him a mechanic, and his only tool was a broken-handled screwdriver.

HE WAS still tinkering when the soldiers came in. While they lined up along the wall, he put Molly's head back on her neck.

She gaped coyly at the new arrivals. "Hello, boys," she simpered. "Looking for a good time?"

Roddie slapped her to silence, reflecting briefly that there were many things he didn't know about Molly. But there was work to be done. Carefully he framed the ritual words she'd taught him: "Soldiers, come to attention and report!"

There were eleven of them, six feet tall, with four limbs and eight extremities. They stood uniformly, the thumbs on each pair of hands touching along the center line of the legs, front feet turned out at an angle of forty-five degrees, rear feet turned inward at thirty degrees.

"Sir," they chorused, "we have met the enemy and he is ours."

He inspected them. All were scratched and dented, but one in particular seemed badly damaged. His left arm was almost severed at the shoulder.

"Come here, fellow," Roddie said. "Let's see if I can fix that."

The soldier took a step forward, lurched suddenly, stopped, and whipped out a bayonet.

"Death to invaders!" he yelled, and charged crazily.

Molly stepped in front of him.

"You aren't being very nice to my baby," she murmured, and thrust her knitting needles into his eyes.

Roddie jumped behind him, knocked off his helmet, and pressed a soft spot on his conical skull. The soldier collapsed to the floor.

RODDIE salvaged and returned Molly's needles. Then he examined the patient, tearing him apart as a boy dismembers an alarm clock.

It was lucky he did. The left arm's pair of hands suddenly writhed off the floor in an effort to choke him. But because the arm was detached at the shoulder and therefore blind, he escaped the clutching onslaught and could goad the reflexing hands into assaulting one another harmlessly.

Meanwhile, the other soldiers left, except for one, apparently another casualty, who stumbled on his way out and fell into the fire. By the time Roddie had hauled him clear, damage was beyond repair. Roddie swore, then decided to try combining parts of this casualty with pieces of the other to make a whole one.

To get more light for the operation, he poked up the fire. Roddie was new at his work, and took it seriously. It alarmed him to watch the soldiers melt away, gradually succumbing to battle damage,

shamed him to see the crispy ruins burn section by section as the invaders repeatedly broke through and had to be burned out.

Soon there would be nothing left of the *Private Property Keep Out* that, according to Molly's bedtime story, the Owners had entrusted to them when driven away by radioactivity. Soon the soldiers themselves would be gone. None would remain to guard the city but a few strayed servants like Molly, and an occasional Civil Defender.

And himself, Roddie reflected, spitting savagely into the fire. He might remain. But how he fared into the picture, he didn't know. And Molly, who claimed to have found him in the ruins after a fight with invaders twenty years before, couldn't or wouldn't say.

Well, for as long as possible, Roddie decided, he'd do his duty as the others did theirs—single-mindedly. Eventually the soldiers might accept him as one of themselves; meanwhile, this newly attempted first aid was useful to them.

He gave the fire a final poke and then paused, wondering if, when heated, his screwdriver could make an unfastened end of wire stick on the grayish spot where it seemed to belong.

Stretching prone to blow the embers hot so he could try out his new idea, Roddie got too close to the flames. Instantly the room filled with the stench of singed

hair. Roddie drew angrily back, beating out the sparks in his uncut blond mane.

As he stood slapping his head and muttering, a deranged Civil Defense firefighter popped into the doorway and covered him with carbon dioxide foam.

Roddie fled. His life-long friends were not merely wearing out, they were unbearably wearing.

IN THE street, even before he'd wiped off the foam, he regretted his flight. The fire was back home. And here in the cold of this fog-shrouded canyon, a mere trail between heaped-up walls of rubble, the diaper he wore felt inadequate against the pre-dawn cold. His cherished weapon, a magnetic tack-hammer, was chill beneath the diaper's top, and the broken, radium-dialed wristwatch suspended from a string around his neck hung clammy against his chest. He stood irresolute on numbing bare feet, and considered returning to the more familiar bedlam.

But colder than cold was his shame at being cold. Molly never was, though she knew how to keep him warm, nor were the others. Hunger, thirst, pain and coldness were sensations never experienced by his friends. Like the growth he'd been undergoing till recently, these were things of ignominy, to be hidden as far as possible from inquiring eyes. Cold as it was, he'd have to hide.

Temporarily, the darkness concealed him, though it was not quite complete. From above the fog, the moon played vaguely deceptive light on the splinters of architecture looming toward it. Some distance off, an owl hooted, but here nocturnal rodents felt free to squeak and rustle as they scampered.

The world seemed ghostly. Yet it wasn't dead; it merely lurked. And as an irrepressible yawn reminded Roddie of his absurd need for sleep even in the midst of danger, he concluded for the thousandth time that the One who'd built him must have been an apprentice.

For just such reasons he'd developed the hideout toward which he now walked. It had been the haven of his adolescence, when the discovery of how much he differed from his friends had been a shock, and the shock itself a difference to be hidden.

His hiding place was a manhole, dead center in the dead street. A weathered bronze bar, carefully placed in the cover's slotted rim, was the levering key that opened its door.

Everything was wrong tonight! He couldn't even find the bar. Of course that spoiled things, because the bar was a roller on which to move the heavy cover from below, and a support that held it ajar for ventilation.

But the example of his friends had taught him above all else to

carry out every purpose. Molly was a nurse; she had raised him despite all obstacles. The soldiers were guards; they protected the ruins against everything larger than a rat. The firefighter had put even *him* out when he was aflame . . .

Anyhow, the manhole cover had been loosened by his frequent handling. He lifted it aside by main strength, then flattened himself to the street, and felt with his feet for the top rung.

Halfway down the iron ladder, something made him pause. He looked, but saw only blackness. He listened, snuffed, found nothing. What could have entered through the iron cover?

He sneered at his own timidity and jumped to the bottom.

It was warm! The dry bottom of the hole had the temperature of body heat, as if a large animal had recently rested there!

QUICKLY, Roddie drew the hammer from his waist. Then, with weapon ready for an instantaneous blow, he stretched his left hand through the darkness. He touched something warm, softish. Gingerly he felt over that curving surface for identifying features.

While Roddie investigated by touch, his long fingers were suddenly seized and bitten. At the same time, his right shin received a savage kick. And his own retaliatory blow was checked in mid-swing by an unexpected voice.

"Get your filthy hands off me!" it whispered angrily. "Who do you think you are?"

Startled, he dropped his hammer. "I'm Roddie," he said, squinting to fumble for it. "Who do you think you are?"

"I'm Ida, naturally! Just how many girls *are* there in this raiding party?"

His first Invader—and he had dropped his weapon!

Scrabbling fearfully in the dust for his hammer, Roddie paused suddenly. This girl—whatever *that* was—seemed to think him one of her own kind. There was a chance, not much, but worth taking, to turn delay to advantage. Maybe he could learn something of value before he killed her. That would make the soldiers accept him!

He stalled, seeking a gambit. "How would I know how many girls there are?"

Half expecting a blow, he got instead an apology. "I'm sorry," the girl said. "I should have known. Never even heard your name before, either. Roddie . . . Whose boat did you come in, Roddie?"

Boat? What was a boat? "How would I know?" he repeated, voice tight with fear of discovery.

If she noticed the tension, she didn't show it. Certainly her whisper was friendly enough. "Oh, you're one of the fellows from Bodega, then. They shoved a boy into our boat at the last minute, too. Tough, wasn't it, getting sep-

arated in the fog and tide like that? If only we didn't have to use boats . . . But, say, how are we going to get away from here?"

"I wouldn't know," Roddie said, closing his fingers on the hammer, and rising. "How did you get in?"

"Followed your footprints. It was sandown and I saw human tracks in the dust and they led me here. Where were you?"

"Scouting around," Roddie said vaguely. "How did you know I was a man when I came back?"

"Because you couldn't see me, silly! You know perfectly well these androids are heat-sensitive and can locate us in the dark!"

Indeed he did know! Many times he'd felt ashamed that Molly could find him whenever she wanted to, even here in the manhole. But perhaps the manhole would help him now to redeem himself . . .

"I'D LIKE to get a look at you," he said.

The girl laughed self-consciously. "It's getting gray out. You'll see me soon enough."

But she'd see *him*, Roddie realized. He had to talk fast.

"What'll we do when it's light?" he asked.

"Well, I guess the boats have gone," Ida said. "You could swim the Gate, I guess—you seem tall and strong enough. But I couldn't. You'll think it's crazy, but I've given this some thought, and even looked it over from the other side.

I expect to try the Golden Gate Bridge!"

Now he was getting somewhere! The bridge was ruined, impassable. Even her own people had crossed the Strait by other means. But if there *were* a way over the bridge . . .

"It's broken," he said. "How in the world can we cross it?"

"Oh, you'll find out, if you take me up there. I—I don't want to be alone, Roddie. Will you go with me? Now?"

Well, she could be made to point out the route before he killed her—if nothing happened when she saw him.

Uneasy, Roddie hefted the hammer in his hand.

A giggle broke the pause. "It's nice of you to wait and let me go first up the ladder," the girl said. "But where the heck is the rusty old thing?"

"I'll go first," said Roddie. He might need the advantage. "The ladder's right behind me."

He climbed with hammer in teeth, and stretched his left hand from street level to grasp and neutralize the girl's right. Then, nervously fingering his weapon, he stared at her in the thin gray dawn.

She was short and lean, except for roundnesses here and there. From her shapeless doekin dress stretched slender legs that tapered to feet that were bare, tiny, and, like her hands, only two in number.

Roddie was pleased. They were evenly matched as to members, and

that would make things easy when the time came.

He looked into her face. It smiled at him, tanned and ruddy, with a full mouth and bright dark eyes that hid under long lashes when he looked too long.

Startling, those wary eyes. Concealing. For a moment he felt a rush of fear, but she gave his hand a squeeze before twisting loose, and burst into sudden laughter.

"Diapers!" she chortled, struggling to keep her voice low. "My big, strong, blond and blue-eyed hero goes into battle wearing diapers, and carrying only a hammer to fight with! You're the most unforgettable character I have ever known!"

He'd passed inspection, then—so far. He expelled his withheld breath, and said, "I think you'll find me a little odd, in some ways."

"Oh, not at all," Ida replied quickly. "Different, yes, but I wouldn't say odd."

WHEN they started down the street, she was nervous despite Roddie's assertion that he knew where the soldiers were posted. He wondered if she felt some of the doubt he'd tried to conceal, shared his visions of what the soldiers might do if they found him brazenly strolling with an invader. They might not believe he was only questioning a prisoner.

Every day, his friends were becoming more unpredictable.

For that very reason, because he didn't know what precautions would do any good, he took a chance and walked openly to the bridge by the most direct route. In time this apparent assurance stilled Ida's fears, and she began to talk.

Many of the things she said were beyond his experience and meaningless to him, but he did note with interest how effective the soldiers had been.

"It's awful," Ida said. "So few young men are left, so many casualties. . . ."

"But why do you—we—keep up the fight?" Roddie asked. "I mean, the soldiers will never leave the city; their purpose is to guard it and they *can't* leave, so they won't attack. Let them alone, and there'll be plenty of young men."

"Well!" said Ida, sharply. "You need indoctrination! Didn't they ever tell you that the city is our home, even if the stupid androids do keep us out? Don't you know how dependent we are on these aids for all our tools and things?"

She sounded suspicious. Roddie shot her a furtive, startled glance. But she wasn't standing off to fight him. On the contrary, she was too close for both comfort and combat. She bumped him hip and shoulder every few steps, and if he edged away, she followed.

He went on with his questioning. "Why are you here? I mean, sure, the others are after tools and things, but what's your purpose?"

Ida shrugged. "I'll admit no girl has ever done it before," she said, "but I thought I could help with the wounded. That's why I have no weapon."

She hesitated, glanced covertly up

concrete foundations on the northern end of the city. Thick fog over the water hid Alcatraz, but in-shore visibility was better, and they could see the beginning of the bridge approach.



at him, and went on with a rush of words. "It's the lack of men, I guess. All the girls are kind of bored and hopeless, so I got this bright idea and stowed away on one of the boats when it was dark and the fog had settled down. Do you think I was being silly?"

"No, but you do seem a little purposeless."

In silence they trudged through a vast area of charred wood and

A stone rattled nearby. There was a clink of metal. Ida gasped, and clung to Roddie's arm.

"Behind me!" he whispered urgently. "Get behind me and hold on!"

He felt Ida's arms encircling his waist, her chin digging into his back below the left shoulder. Facing them, a hundred feet away, stood a soldier. He looked contemptuous, hostile.



"It's all right," Roddie said, his voice breaking.

There was a long, sullen, heart-stopping stare. Then the soldier turned and walked away.

Ida's grip loosened, and he could feel her sag behind him. Roddie turned and held her. With eyes closed, she pressed cold blue lips to his. He grimaced and turned away his head.

Ida's response was quick. "Forgive me," she breathed, and slipped from his arms, but she held herself erect. "I was so scared. And then we've had no sleep, no food or water."

Roddie was familiar with these signs of weakness, proud of appearing to deny his own humiliating needs.

"I guess you're not as strong as

me," he said smugly "I'll take care of you. Of course we can't sleep now, but I'll get food and water."

Leaving her to follow, he turned left to the ruins of a supermarket he had previously visited, demonstrating his superior strength by setting a pace Ida couldn't match. By the time she caught up with him, he had grubbed out a few cans of the special size that Molly always chose. Picking two that were neither dented, swollen, nor rusted, he smashed an end of each with his hammer, and gave Ida her choice of strained spinach or squash.

"Baby food!" she muttered. "Maybe it's just what we need, but to eat baby food with a man wearing a diaper . . . Tell me, Roddie, how did you happen to know where to find it?"

"Well, this is the northern end of the city," he answered, shrugging. "I've been here before."

"Why did the soldier let us go?"

"This watch," he said, touching the radium dial. "It's a talisman."

But Ida's eyes had widened, and the color was gone from her face. She was silent, too, except when asking him to fill his fast-emptied can with rain-water. She didn't finish her own portion, but lay back in the rubble with feet higher than her head, obviously trying to renew her strength.

And when they resumed their walk, her sullen, fear-clouded face showed plainly that he'd given himself away.

But to kill her now, before learning how she planned to cross the supposedly impassable bridge, seemed as purposeless and impulsive as Ida herself. Roddie didn't think, in any case, that her death would satisfy the soldiers. With new and useful information to offer, he might join them as an equal at last. But if his dalliance with this enemy seemed pointless, not even Molly's knitting needles could protect him.

He was sure the soldiers must be tracking the mysterious emanations of his watch dial, and had trouble to keep from glancing over his shoulder at every step. But arrival at the bridge approach ended the need for this self-restraint. Here, difficult going demanded full attention.

HED never gone as far as the bridge before, not having wanted to look as if he might be leaving the city. The approach was a jungle of concrete with an underbrush of reinforcing-steel that reached for the unwary with rusted spines. Frequently they had to balance on cracked girders, and inch over roadless spots high off the ground.

Here Ida took the lead. When they got to where three approach roads made a clover-leaf, she led him down a side road and into a forest.

Roddie stopped, and seized her arm.

"What are you trying to do?" he demanded.

"I'm taking you with me," Ida said firmly. "Taking you where you belong!"

"No!" he blurted, drawing his hammer. "I can't go, nor let you go. I belong here!"

Ida gasped, twisted loose, and ran. Roddie ran after her.

She wasn't so easily caught. Like a frightened doe, she dashed in and out among the trees, leaped to the bridge's underpinnings where they thrust rustedly from a cliff, and scrambled up the ramp.

Roddie sighed and slowed down. The pavement ended just beyond the cable anchors. From there to the south tower, only an occasional dangling support wire showed where the actual bridge had been suspended. Ida was trapped.

He could take his time. Let the soldiers come up, as they undoubtedly would, to finish the job . . .

But Ida didn't seem to realize she was trapped. Without hesitation she dashed up the main left-hand suspension cable and ran along its curved steel surface.

For a moment, Roddie thought of letting her go, letting her run up the ever-steepening catenary until—because there were no guardropes or handgrips—she simply fell. That would solve his problem.

Except it wouldn't be *his* solution. Her death wouldn't prove him to his friends.

He set out quickly, before Ida

was lost to sight in the thick fog that billowed in straight from the ocean. At first he ran erect along the top of the yard-wide cylinder of twisted metal, but soon the curve steepened. He had to go on all fours, clinging palm and sole.

Blood was on the cable where she'd passed. More blood stained it when he'd followed.

But because his friends knew neither pain nor fatigue, Roddie would admit none either. Nor would he give in to the fear that dizzied him at every downward look. He scrambled on like an automaton, watching only his holds, till he rammed Ida's rear with his head.

SHE had stopped, trembling and gasping. Roddie clung just below her and looked dazedly around. There was nothing in sight but fog, pierced by the rapier of rusted wire supporting them. Neither end of it was in sight.

Upward lay success, if death were not nearer on the cable. No soldier had ever come even this far, for soldiers, as he'd told Ida, never left the city, were not built to do so. But *he* was here; with luck, he could capitalize on the differences that had plagued him so long.

"Go on!" he ordered hoarsely. "Move!"

There was neither answer nor result. He broke off an end of loosened wire and jabbed her rear. Ida gasped and crawled on.

Up and up they went, chilled, wet, bleeding, pain-racked, exhausted. Never had Roddie felt so thoroughly the defects of his peculiar non-mechanical construction.

Without realizing it, he acquired a new purpose, a duty as compelling as that of any soldier or fire-watcher. He had to keep that trembling body of his alive, mount to the tall rust tower overhead.

He climbed and he made Ida climb, till, at nightmare's end, the fog thinned and they came into clear, windswept air and clawed up the last hundred feet to sanctuary.

They were completely spent. Without word or thought they crept within the tower, huddled together for warmth on its dank steel deck, and slept for several hours.

RODDIE awoke as Ida finished struggling free of his unconscious grip. Limping, he joined her painful walk around the tower. From its openings they looked out on a strange and isolated world.

To the north, where Ida seemed drawn as though by instinct, Mount Tamalpais reared its brushy head, a looming island above a billowy white sea of fog. To the south were the Twin Peaks, a pair of buttons on a cotton sheet. Eastward lay Mount Diablo, bald and brooding, tallest of the peaks and most forbidding.

But westward over the ocean lay the land of gold—of all the kinds of gold there are, from brightest

yellow to deepest orange. Only a small portion of the setting sun glared above the fog-bank; the rest seemed to have been broken off and smeared around by a child in love with its color.

Fascinated, Roddie stared for minutes, but turned when Ida showed no interest. She was intent on the tower itself. Following her eyes, Roddie saw his duty made suddenly clear.

Easy to make out even in the fading light was the route by which Invaders could cross to the foot of this tower on the remaining ruins of the road, climb to where he now stood, and then descend the cable over the bridge's gap and catch the city unaware. Easy to estimate was the advantage of even this perilous route over things that scattered on the water and prevented a landing in strength. Easy to see was the need to kill Ida before she carried home this knowledge.

Roddie took the hammer from his waist.

"Don't! Oh, don't!" Ida screamed. She burst into tears and covered her face with scratched and bloodied hands.

Surprised, Roddie withheld the blow. He had wept, as a child, and, weeping, had for the first time learned he differed from his friends. Ida's tears disturbed him, bringing unhappy memories.

"Why should you cry?" he asked comfortingly. "You know your people will come back to

avenge you and will destroy my friends."

"But—but my people are your people, too," Ida wailed. "It's so senseless, now, after all our struggle to escape. Don't you see? Your friends are only machines, built by our ancestors. We are Men—and the city is ours, not theirs!"

"It *can't* be," Roddie objected. "The city surely belongs to those who are superior, and my friends are superior to your people, even to me. Each of *us* has a purpose, though, while you Invaders seem to be aimless. Each of *us* helps preserve the city; you only try to rob and end it by destroying it. My people must be the true Men, because they're so much more rational than yours . . . And it isn't rational to let you escape."

Ida had turned up her tear-streaked face to stare at him.

"Rational! What's rational about murdering a defenseless girl in cold blood? Don't you realize we're the same sort of being, we two? Don't—don't you remember how we've been with each other all day?"

She paused. Roddie noticed that her eyes were dark and frightened, yet somehow soft, over scarlet cheeks. He had to look away. But he said nothing.

"Never mind!" Ida said viciously. "You can't make me beg. Go ahead and kill—see if it proves you're superior. My people will take over the city regardless of you and me, and regardless of your jumping-

jack friends, too! Men can accomplish anything!"

SCORNFULLY she turned and looked toward the western twilight. It was Roddie's turn to stand and stare.

"Purpose!" Ida flung at him over her shoulder. "Logic! Women hear so much of that from men! You're a man, all right! Men *always* call it logic when they want to destroy! Loyalty to your own sort, kindness, affection—all emotional, aren't they? Not a bit logical. Emotion is for creating, and it's so much more logical to destroy, isn't it?"

She whirled back toward him, advancing as if she wanted to sink her teeth into his throat. "Go ahead. Get it over with—if you have the courage."

It was hard for Roddie to look away from that wrath-crimsoned face, but it was even harder to keep staring into the blaze of her eyes. He compromised by gazing out an opening at the gathering dusk. He thought for a long time before he decided to tuck his hammer away.

"It isn't reasonable to kill you now," he said. "Too dark. You can't possibly get down that half-ruined manway tonight, so let's see how I feel in the morning."

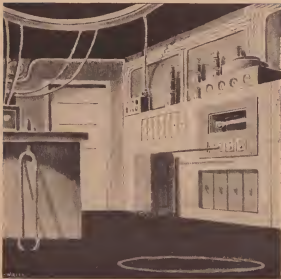
Ida began to weep again, and Roddie found it necessary to comfort her.

And by morning he knew he was a Man.

—DAVE DRYFOOS

MARS CHILD

The colony on the red planet had no need for heroes. It wanted people who knew how to solve the problem of simple survival.





Illustrated by WILLER

BY CYRIL JUDD

CHAPTER ONE

JIM KANDRO couldn't pace the corridors, because there weren't any. The Colony's hospital was simply an extra room built onto the doctor's rammed-earth house. They still called it "earth," though it was the rust-red-dened soil of Mars.

The narrow space between bed and wall cramped his restless legs; the monotonous motion wearied his arm. But Jim stayed on, doggedly determined to see the thing through, rubbing his wife's back and whispering reassurances, as much to himself as to her.

"Why don't you let me take over for a while?" the doctor suggested. Jim's usefulness was over now; the man was only communicating his own panic to his wife. "Go in the other room and lie down, or take a walk outside if you want to. Nothing's going to happen for a while yet."

"Doc . . ." The man's voice was rough with anxiety, but he held back the frantic questions. "Please, Tony," he said simply, "I'd rather stick around." He fixed a smile to his face as he bent over Polly again.

Anna came in before Tony had quite decided to call her. It was a talent she seemed to have, one of the reasons why he had chosen her for his assistant.

"I think Jim needs a cup of coffee," he told her firmly.

Kandro straightened up awkwardly. "All right, Doc." He was trying hard to be matter-of-fact. "You'll call me if anything—when there's news?"

"Of course he will." Anna's quick assurance forestalled Tony's exasperated retort. She put her hand on Kandro's arm, and smiled down at the woman on the bed. "Not much longer now, Polly," she said with quiet certainty. "Come on, Jim."

As the door closed behind them, Tony turned to his patient, and surprised a brief smile on her lips. "You mustn't mind," she explained, almost apologetically. "He's so worried."

She had no breath for more. She twisted suddenly on the narrow bed and clutched at the air till Tony gave her his hand to squeeze on. Every other form of physical labor, he reflected unhappily, was made easier by the light gravity of Mars; but the labor of childbirth was eternally the same. And there was

nothing he could do right now, except to offer her the reassurance of his presence. He stood and waited, gooseflesh cascading from the nape of his neck down his spine as she ground her teeth against the pain.

When it was gone and she released his hand, he turned to the sterilizer for a fresh glove. One more examination, he decided. Something should be happening by now.

He heard her deep inhalation behind him.

"Anna's so nice," she sighed.

HE HEARD the difference before he turned and saw it. Polly was lying back, completely relaxed, making the most of the time before the pain returned.

"Yes, she is," Tony said. He dropped the glove on the table; another examination wasn't going to do any good, for her or for him. Quit the damned fiddling, he told himself. Sit and wait. You let that poor son-of-a-gun get you down. If she can wait, you can too. Be the doctor you would have been in Pittsburgh or Springfield—any Springfield on Earth. So you're on Mars. So what? Sit and wait.

He got a chair and put it next to the high bed, dropped his hand casually on the sheet where Polly could see it, where she could grab it again when she wanted to. He leaned back and forced himself, muscle by unwilling muscle, to relax.

ON THE other side of the door, Jim raised his "coffee" cup for the fourth time to his lips, and for the fourth time put it down again untested.

"But what do you *think*, Anna?" he burst out. "How does it look to you? You'd know if there was anything . . . *wrong*."

"It looks all right to me," she said again, gently. "It looks like a normal delivery."

"But she's been—she started at six o'clock this morning! Why should it take so long?"

"Sometimes it does. That doesn't mean there's anything wrong. It's hard work, that's all. It takes time." It was useless to tell him not to worry. She went over to the work counter that ran the length of the rectangular room. "I don't think it'll be much longer now, Jim. Do you want to try and get some sleep while you wait? Or if you're going to stay up, could you give me a hand here?" She pulled out materials quickly.

"Sure." He got up, still holding the cup as though he didn't even know it was in his hand. "I mean, I'll be glad to help." He let Anna relieve him of the cup, and accepted an alky torch, never wondering why she should choose to start a job at half-past midnight.

"Look," he said desperately, "you would tell me, wouldn't you, if it wasn't going right? He—Tony

wouldn't want to keep me from knowing, would he? She never got this far before, you know."

"Believe me, Jim, if there were anything wrong, Tony would tell you. And I don't know any more than you do. You were in there longer than I was. Here, hold the flame down this way, will you?"

For just a minute, he turned his attention to the work. "But why wouldn't he *tell* me anything?"

"Because there was nothing to tell, I imagine." Even Anna's patience could wear thin. Deftly, she removed the torch from his hand before the down-turned flame could do any damage.

Kandoo wanted to yell; *you don't know, none of you know, twelve years we've been married and a man and a woman want kids, and none of you know how we want kids and all she does is get so sick you think she's dying and she never got this far before and you just don't know . . .*

He saw in Anna's eyes that he didn't have to say it, that she did understand. Her arms went out a little, and the big, rawboned man flopped on his knees before the plain little woman and sobbed with his head awkwardly pillowed against her.

AT 3:37 A. M., Dr. Tony Hellman adjusted a tiny oxygen mask over the red button nose of a

newborn infant, wiped it and wrapped it, and returned his attention to the mother. He reached for the buzzer that would summon Anna from the other room to help; but he didn't push it. Kandro was sure to come storming in with her, and Polly was too wakeful and excited as it was. Then, too, there was a certain perverse satisfaction in doing the whole job himself, even the messy wiping up operations that would be left to a student nurse back on Earth.

WHEN he had finished, he overrode Polly's plan to stay awake and stare at her baby. He gave her a stiff shot of sedative to make certain, then decided to give her her OxEn pill for the next day as well, hoping she would sleep through till late morning.

Only since the development of the magic pink pellets, containing the so-called "oxygen enzyme," had it been possible for most human beings to live a normal life on Mars. Before that, anyone who did not have the rare good luck to possess naturally Marsworthy lungs lived permanently in an oxygen mask. Now masks were needed only for babies too small to tolerate the pill.

The miracle enzyme made the air of Mars as useful to human lungs as the native atmosphere of Earth . . . always provided the human in question took his pill religiously every day. Let thirty hours go by

without renewing the treatment, and he would be dying, within minutes, of anoxemia.

Tony took a last look at the baby, made sure the tiny mask was properly adjusted, and checked the oxy tank for proper flow. Polly was already half-asleep. He went quietly past her bed, and opened the door to his living room.

"Sh!" Anna turned from her workbench, her face warm and cheerful. She pointed to the bunk where Jim, fully dressed in tunic and sandboots, lay fast asleep.

"Everything all right?"

Tony nodded. "Damn sight better than I expected." After the glaring light of the hospital room, the quiet dark in here was good. More than that, Anna's untroubled presence served to dissolve all the nervous tension of the hours before. Suddenly too fatigued even to talk, he finished briefly, "Boy—five pounds two ounces, Earth weight—good color—strong too."

"Good." Anna returned her attention to the work. "I'll finish this up and then go sit with her. I'll call you if she needs anything."

"What about him?"

Anna glanced at Jim's sprawled figure. "He'll be all right." She smiled. "He can wait a few hours to meet his son."

For just a moment more the doctor stood there, watching her, fascinated as always by her delicate art. A puff on the tube, a twist as it reddened in the flame, a spin against

an iron tool, another puff. All of it casual, seemingly random, and then, somehow, there was a finished piece of work—part of the intricate glass tubing always needed at the Lab, a fragile-looking piece of stemware for some new colonist's household, a precise hypodermic syringe for himself.

He watched till his weary eyes refused the bright spot of light where the pale flame washed over the glowing glass. Then he stumbled into the adjoining bedroom and slept.

CHAPTER TWO

THE Lab was the cash drop of Sun Lake. Mars had a slight case of radioactivity, nothing you couldn't live with, but enough to enable Sun Lake City Colony to concentrate and isolate radioisotopes and radioactive organics for sale on Earth at better than competitive prices, even after the stiff tariff for transport.

The materials handled were only mildly dangerous, but it was the doctor's job to render them effectively not dangerous at all. Twice a day, before work started in the morning and again before quitting time, Tony gingered the whole place. On this precaution the whole community depended, not only for safeguarding their sole source of income, but for their very lives. Every adult member of the Colony did work at least indirectly connected

with the Lab; all of them spent some time there.

Among other things, it was the only building with a large enough room to serve for social functions. And it offered the only possible change from mud-colored walls, from isomorphic rooms, all just 15x15, from cement floors and wall bunks. The Lab had everything the other buildings lacked—steel framework and aluminum wall sheathing; copper tubing and running hot water; built-in power outlets, Earth-made furniture; even the blessings of an Earth-import air filtering system.

The one kilometer walk out to the Lab in the early morning always infused the doctor with a glowing sense of confidence and well-being. In a year on Mars, he had lost little of his first pleasure in the buoyancy afforded by the low gravity. Walking was effortless; and, in the thin air, an hour's sunlight was enough to clear the night's chill from the open spaces. At noon, the sun would be too bright; in the evening, the cold would return as suddenly as it had departed. Now, in the first part of the morning, it was like a perfect autumn day on Earth.

Behind him, in the houses that lined both sides of the colony's single curved street, people were dressing hurriedly, eating, making plans, getting ready for the day's work. Ahead, the shining blue walls of the Lab were set off against the

magnificent backdrop of *Lacus Solis* itself. The ancient sea bed was alive again with color as the early sun's rays glinted off millions of tiny particles, the salts and minerals of Mars deposited by long-dried waters in millenia past. The clean lines of the new building against that sparkling expanse constituted at once a challenge and a reassurance—this is what man can do; here is everything he needs to do it with.

If we can . . . a second chance for man, if we can learn how to use it. . . .

Tony unlocked the storage cabinet built into the massive lead-lined door of the Lab. He took out his suit of protective armor—probably the only Earth-import wearing apparel ever bought and paid for by the Colony—but before he got into it, he turned to look back just once at the little huddle of houses where, a few hours ago, Polly Kandro had affirmed her faith in Sun Lake's future in the most emphatic personal manner.

THE solidity of the Lab was a disagreeable symbol of the Colony's present status; it was still the only decent structure Sun Lake had to show. Halfway up the almost imperceptible three kilometer slope from "canal" bed at his left to "sea" level at his right sat the Colony, lumpyish. Every building, like Tony's own home-and-hospital, was tamped native dirt. The arc of dull rust-brown huts squatting close

to the ground and close to each other presented to Tony a monotonous row of identical plastic-widowed backsides.

Behind them, fields A, B, C, and D showed, even from the Lab, the work of Sun Lake's "mudkickers"—the agronomists who, using tools as ancient as the harrow and as modern as the mutation-creating particles that stream from a cyclotron, were changing Mars plants into things that could nourish an Earth animal, and changing Earth plants into things that could draw nourishment from the grudging Martian soil.

Mutated bean plants whose ancestors had been a button-bearing Mars cactus dotted field A. Mutated cauliflowers—the size of apples, dark brown and still manufacturing in themselves too much potassium cyanide to be edible—darkened field B; another few plant-generations and they would be food for the Colony table, though tasting somewhat of the neutralized cyanide bitter almonds.

Ten kilometers beyond the fields of bastard Earth-Mars vegetation, there had been beauty only recently—the fantastically eroded Rimrock Hills. Five months ago, however, the first pre-fab shacks had gone up in the camp on the other side of the hills. Three months ago the first furnace had been fired at Pitcoo Three: Pittsburgh Coal, Coke and Iron Company's Mars Metal Refining Plant Number Three. Now a

dirty shroud of yellow-stained smoke draped the peaks from dawn to dark.

With a feeling of intense distaste, Tony started climbing into his suit of armor. *A second chance for man . . .*

His own high-flown thoughts mocked him. Another chance to do exactly as they had done on Earth. Already the clean air of Mars was thickening with the excretions of Earth's commerce. Nor was the camp beyond the hull a lone offender. Even Sun Lake, to survive at all, had to maintain a cash crop economy—and the Lab was the potentially deadly crop.

Tony made sure that every flap on his suit was zippered and closed, and the last adjustments made on the helmet. He picked up the hand counter from the bottom of the compartment and worked the screw around to calibrate out Mars' naturally heavy background "noise." The needle eased to zero on the dial. Only then did he open the heavy door of the Lab itself and begin his slow trip of inspection through the building.

ALL areas were well under the threshold of danger, as usual, except for a bot patch in the isotope room. Tony chalked a yellow line around the spot and marked the door of the room with a bright yellow cross. Finished, he headed straight for the clean-up room and checked the condition of the ex-

terior of his suit against the bigger stationary radiation counter that was kept there.

Nor until he was sure he hadn't picked up anything on gloves or boots did he remove his suit and dump it down the chute for routine de-radiation. He hated to take time for the rest of the procedure today—he had to check with the men who were working in the hot spot; he had to get back to the hospital to see Polly; he had a patient, Joan Radcliff, who worried him badly. What was more, he'd slept too late to eat breakfast at the communal table shared by most unmarried Colony members; he hadn't even had "coffee"—and he missed it. But after the number of times he'd nagged the others about skimping on safety precautions, he couldn't pass up any of them himself.

He stripped and dumped his clothes down another chute, sand-scrubbed himself, and holding his breath, walked through the stinking alcohol spray. Methyl alcohol, cheaper and easier to produce in the Lab than water, and sand for soap made bathing an ordeal instead of the pleasant ritual it had been on Earth.

Tony moved fast, but by the time he had put on a fresh tunic and boots and emerged into the central hall, the Lab was already full of people getting set for the day's work. He edged past a knot of busy conversationalists in the corridor.

"Hey, Doc . . ."

He paused, and that was his undoing.

"How's Polly? Tony, hold on—how's the baby? Are they all right?—Doc, wait a minute. Did everything go all right?—Where are they?—What is it . . . ?"

HE ANSWERED the same questions a dozen times. It seemed that half the population of Sun Lake was in the corridor with him, and they all wanted to know the same thing. Finally, despairing of getting through until he had satisfied them all, Tony climbed up on a chair and addressed the crowd.

"Five pounds, two ounces, Earth weight—a boy—wrigglingest baby I ever saw. Plenty lively, and he looks just like his old man. What else do you want to know?"

"How's Polly?"

"Fine. So's Jim." The hoary joke got its inevitable laugh.

Then one of the chemists said, "I make a motion for a birthday present. Let's build that other room onto the Kandro house right now."

It was an offer that had been made months before, and that Polly, hesitant and slightly superstitious, had refused. "There'll be time enough after the baby's born," she had told them, and stuck to it.

Tony knew why; knew about the first time, eleven years before, when she had carried a child for seven months, and then had to pack away

all the things she had lovingly collected for its birth. They had stayed in their cartons for four more years, and two more miscarriages, before she gave them tearfully to a luckier woman.

"When is she going home, Doc?" one of the electronics men asked. "How much time have we got?"

"I don't know. Maybe tomorrow morning," Tony told them. "She's in pretty good shape. It's just a matter of where she'll be most comfortable. I don't imagine she'll want to stay in the hospital very long . . . After all, it's not exactly designed for luxurious convalescence." They were all familiar with the crowded little room; he waited for a dutiful laugh to die down, and added, "I think tomorrow will be about right . . . not later than the day after."

"We better get started then," Mimi Jonathan, the pert black-haired Lab administrator, spoke up. "Suppose I make up some work parties, and we get things going?"

She produced a pencil and paper and began taking down the names and abilities of everyone whose Lab work was not too pressing. Two groups of volunteers left promptly, to collect soil from the old "canal" bottom, and to set up the frames for ramming. Others would have to stay in the Lab to set up the machinery for work on the synthetics that would paint the new room, build the new furniture, and clothe the new baby. While Mimi plunged

into the complexities of reassigning work space and job time, the doctor managed to get away from the enthusiastic crowd.

He made his way to the isotopes room, and was happy to find Sam Flexner, the chemist in charge, waiting for him at the yellow-chalked door. Apparently his harping on safety rules had penetrated in at least one case; Sam knew enough to stay on the spot even in the midst of the sudden excitement over the baby.

TONY opened the door and pointed out the ragged chalked circle on the floor. "Any idea what it is?"

"We were running some radio-phosphorus," Sam said doubtfully. "But there was no trouble on the run. Must be spillage." The chemist had a young open face, and Tony liked him. He began to fill in the necessary report.

"What reason?" Spillage was unusual.

"It's a bigger order than we usually handle--must have been a hundred kilograms." Sam looked up sharply. "It was all right yesterday, wasn't it? The afternoon checkup?"

Tony nodded.

"Then it must have been at closing. I . . . well, I left a few minutes early yesterday. Figured the boys could close up all right, but I guess one of them took a lazy man's load in his tote box . . . filled it up too

high to save himself a trip. I'll check on it and tell them in a nice way, all right?"

"That should do it. But I better have a look at the checkout tubes."

Sam brought over a tray of tubes resting in numbered grooves. He was wearing one like them pinned to his own lapel. The contents of the tubes was its normal dirty white. Purple would have meant "too close to hot stuff too long."

"Okay," said Tony, checking his form. "That hot spot there, I think you'd better chisel it out and get one of the suppliers to take it way out and dump it."

"Old Learoyd was here with a load of vanadium dirt. He'll do it when he leaves for Pittco."

"Fine. Get it done. And tell Learoyd to put the stuff in the back of his rig. I don't think you could kill any of those old boys with anything subtler than a meat ax, but I wouldn't want him to sit next to it for a ten-hour trip." He dated and timed off the form. "That's that. Only you better stick around till close-up after this." He smiled and put a stop to the young chemist's attempt at explanation. "How's Verna, anyhow? Something better happen soon, if it's going to make all this trouble."

SAM grinned back. "You may hear something soon," he admitted. "But please don't--uh--"

"Doctors don't gossip," Tony said. "One thing about this place,"



he added, "we can't help making history every time we turn around. Have a baby, and it's the first baby; have another baby, and it's the first girl born; slice out an appendix, and it's the first abdominal surgery. Let's see—you and Verna will be the first marriage-between-a-drop-in-chemical-engineer-and-a-share-holding-agronomist—if she'll have you."

"Sounds like one of those weather records," complained Sam. "The coldest 3.00 P.M. reading at the corner of Spruce and Juice on a January 16th since 2107."

"It's your place in history," Tony assured him. "We'll all be footnotes. I'll see you this afternoon."

CHAPTER THREE

TONY stepped out with springs in his knees, and, feeling the waxing heat of the morning, threw back the hood of his parka. The marvelous clear air of an hour earlier was fast disappearing, as the mineral trash that covered Mars' surface began to heat and reel the atmosphere. He looked off toward the Rumrock Hills, mourning their vanished beauty; then he stopped in surprise, squinting at the enigmatic black bugs crawling back and forth within the shadow of the hills.

He stood there, watching, as the seemingly random pattern of mo-



tion trended gradually in the direction of the Colony.

Who would be out on the desert afoot? He stopped and shielded his eyes. There were about twenty of them, and they were humped with—carbines and oxy masks.

The military!

But why? There'd never been a visit from Commissioner Bell's little intercolony police force before; never been any occasion for it. Each colony handled its own internal policing.

It was a year now since Bell's boys had been out for anything except routine administrative work, such as guard mount over the rocket; the last time was when an

ace foundryman for Mars Machine Tool was rightly suspected of committing mayhem on a Marsport shopkeeper. Mars Machine Tool's colony administration insisted on being unimpressed by the evidence and refused to surrender him to Marsport. Bell's boys had simply walked in and taken him away for his trial and conviction.

But Sun Lakers weren't given to mayhem.

Tony headed back for the Lab as the crooked trail of the soldiers straightened out into a beeline for the same place. He had his patients, but he was also a member of the Colony Council and this looked like Council business.

In the Lab he went straight to the front office and asked Mimi: "Did Harve ever get that recorder put together?"

"Last week," she said. "It's been a blessing too. Why?"

"I think Bell's boys are paying us a call," He told her what he'd seen outside. "It might be useful to have a record of it."

Mimi nodded thoughtfully, and flipped a lever at the side of her desk. "That'll register anywhere in the office," she explained. "I'm a pacer—Harve set it up so I could walk all over the office while I talk, and still have it record."

Sam Flexner was also there. He put down a completed report form on the spillage in his department to ask: "What do they want?"

"I don't know," Tony told him. "But I think we'd better put in an intercom call for Joe Gracey to come on out here. He ought to be tending his seedling in C Area. Phone the South End to send a runner and get him out here on the double."

Gracey was the senior agronomist, and, like Mimi and Tony, a member of the Colony Council. The fourth member, and most recent addition, was Nick Cantrella; in only six months' time since his arrival at Sun Lake, Nick had risen from junior setup man to bossing all maintenance and procurement for the Lab. At the moment he was home with a nasty chemical burn on his arm. It wasn't really

so bad that he couldn't be called in for an emergency, but Tony hesitated to do so, and he noticed that Mimi didn't suggest it either. Nick had a red-hot temper and practically no inhibitions.

"No," the doctor said to the questioners that began to press around him, "I don't think we ought to go out and meet them. Better just go ahead and work and get the new room for the Kandros put together. Flexner, will you stick around? It may be some damn thing or other about our atomics—some technical precaution we may have missed."

"No, sir," said another man emphatically. It was O'Donnell, who had ditched a law career to become a sweeper and then a maintenance man and then a good jury-rig physicist. It was his job to see that no daylight showed between the Colony's atomics practice and the law.

"Hmp," said the doctor. "You stick around too."

THERE was a thudding on the door and a self-conscious calling of an archaic formula: "Open in the name of the law!"

The delegation was a half-platoon of soldiers with their carbines and cumbersome oxygen masks and tanks—a choice bit of military conservatism, since a pocketful of OxEn pills weighed a hundredth as much and would keep them alive a hundred times longer.

There were two civilians and an officer—Lieutenant Ed Nealey.

Tony was relieved to see him; they were fellow-members of a subscription club that split the heavy postage on Earthside scientific periodicals, and Tony knew Nealey to be a conscientious and level-headed young career officer.

The doctor was extending his hand to Nealey when he remembered his protocol. One of the civilians was unknown to him, but the other was Hamilton Bell, Commissioner of Interplanetary Affairs.

"I'm Tony Hellman, Commissioner," he said. "I don't know if you remember me. I'm the doctor here and a member of our Colony's Council."

The commissioner was a small man, tending somewhat to pompous frailty. He looked like the kind of person rumor made him out to be: a never very important functionary who got the dreary Mars post when a very ordinary graft ring of which he was a prominent member was "exposed." The exposure followed only reasonably quickly on the heels of his bolt from the Insurgentist Senate minority in the Panamerican World Federation. In the interval between the news accounts of Bell's political switch, and the spectacular news stories of graft corruption in which he was involved, there had been just time for the minority to become a majority . . .

"Can you speak for the Colony?"

he asked abruptly, ignoring Tony's hand.

THE doctor cast a bewildered look at Lt. Nealey, whose eyes were front and whose face was set. Tony noticed he carried in a canvas scabbard the disassembled dipole and handle of an electronic "Bloodhound."

"I'm a council member," Tony said. "So is Miss Jonathan here. Another council member's ill and the third is on his way. The two of us can speak for the Colony. Now, what can we do for you?"

"It's a police matter. Do you care to make a statement before I have to drag the situation out into the open?"

"Let me take it," muttered O'Donnell. Tony nodded. The lawyer-turned-physicist firmly told the commissioner: "I want to remind you that we are a chartered colony, and, under the charter, are entitled to police ourselves. And I also want to say that we are not going to respond to any fishing expeditions until we hear what the complaint is."

"Suit yourself," grunted the commissioner. "But you're not self-policing when you steal from another colony. Mr. Brenner, tell your story."

Eyes swiveled to the other civilian, Brenner of Brenner Pharmaceuticals. So that, thought Tony, is what a billionaire looks like. Younger than anyone could reason-

sibly expect, and somehow looking comfortably conservative even in a parka of orange-red mutation mink. The best of food, plenty of rest, and the most careful attention to his bodily needs were combining to cover the prominent bones of his face with deceptive pads of soft flesh; but he still wore the countenance of a lean and questing man: a perplexing expression of bland good humor or of permanent inner amusement.

Brenner shrugged and smiled a little uncomfortably. "I had no choice, Doctor," he said. "A hundred kilos of my marcaine—bulk micron dust, you understand—was stolen yesterday."

SOMEBODY gasped. A hundred kilograms of marcaine, principal product of Brenner's works, was a small fortune on Mars—and a large fortune on Earth, if it could be diverted from medical use and channeled into one of the innumerable pipelines to addicts.

"Naturally I reported it," Brenner explained. "And of course Commissioner Bell had to order a Bloodhound search. It brought us here."

"Ed," Tony appealed to the grim-faced lieutenant, "did you operate the Bloodhound? Will you give me your personal word that it led to the Colony?"

"Answer him, Lieutenant," Bell ordered.

"I'm sorry to . . . Dr. Hellman,"

Nealey said stiffly. "I checked the machine three times, myself. Strong scent from Brenner's storeroom to the Rimrocks, then some confusion in the Rimrock caves, and a weakening scent from the Rimrocks to here. It doesn't actually stand up all the way here, but it doesn't go anywhere else. That's definite."

"Please, Dr. Hellman," said Brenner kindly. "You needn't look so stricken. All it means is that there's a rotten apple in your barrel. That happens."

Gracey hurried in, a spindle-shanked ex-professor of low-temperature agronomy from Nome University. He addressed himself directly to Brenner: "What are you doing here?"

"Mr. Brenner has sworn out an intercolony complaint of grand theft," said the commissioner. "You're Gracey? You needn't waste your breath trying to blacken Mr. Brenner's character. He's already informed me that there was a disagreement between you which you've taken to heart." His meager smile showed that what he meant was "became a little cracked over."

"He hasn't got any character to blacken," growled the agronomist. "He tried to get me to breed marcaine weeds for higher production of his bell-dust and I wanted to know why. Wasn't that naive of me? I checked on Earth and I found out that maybe ten per cent of his marcaine goes into medical hands and the rest—"

The commissioner shut him up with a decisive: "That's enough. I will not listen to random accusations based on newspaper gossip. I don't doubt that after Marcaine arrives on Earth some of it is diverted. The world has its weak-willed people. But Mr. Brenner is a responsible manufacturer and you people . . . I respect your ideals but I'm afraid I can't say much for your performance. The business of Mars is business. And a major theft from one of our leading industrial colonies is very serious indeed."

"Gentlemen," said Brenner, "I *can't* ignore it. I'd like to, simply to spare the unpleasantness, but the amount involved is too important financially. And there's always the danger that some quantity might get into illegal channels."

GRACEY snarled, looked as though he wanted to spit on the immaculate floor of the Lab.

"What exactly do you intend to do?" Tony asked hastily, anxious to forestall an eruption from the irritable agronomist.

"It should be quite clear by now," Bell replied, "that it is my duty to conduct a search of these premises."

"You'll keep your grabbing little hands off our equipment!" Unexpectedly, it was Flexner who exploded. "It's all nonsense, and you know it. What would we steal from that *drug peddler*?"

Brenner's quiet laugh rasped into the appalled silence that fol-

lowed. Flexner, enraged, took just one belligerent step toward the trillionaire and the commissioner.

"Sergeant!" barked Lieutenant Nesley, and a noncom, unslinging his carbine like an automaton, aimed from the hip at the chemist. Flexner stopped in his tracks, red-faced with anger, and said bitterly: "So he can make the damned stuff and welcome, but all hell breaks loose if somebody hooks it."

"For the last time—" began Bell, exasperatedly, and then interrupted himself. He drew a paper from his parka and handed it to Tony. "The warrant," he said shortly.

Tony passed it to O'Donnell and there was a long, foot-tapping minute while the ex-lawyer studied the document.

At last O'Donnell said, "According to this, you plan to open our shipping crates and break into our process ovens. Is that correct?" He was pale with anger and worry.

"Correct," said the commissioner, while Brenner shrugged helplessly. "Marcaine could, of course, be concealed from the Bloodhound in lead-insulated containers."

"Then you *are* aware," said Tony, "that we manufacture radioactive materials?"

"I am."

"And you realize that there are certain procedures required by law for the handling of such materials?"

"Doctor Hellman! Has it slipped your mind that I represent the law you're speaking of?"

"Not at all!" Tony was determined not to lose his temper. "But I could hardly expect you to carry in your mind all the time the innumerable petty details that must come under your administration. And it happens that I represent, here in the Colony, the observance of the laws under which our radioactives license was granted. I think that as chief radiological monitor for the Colony, I should be permitted to accompany your men in any search.

"That's out of the question." The commissioner dismissed the request impatiently. "The license you spoke of is, as we both know, a grade-B atomics license, permitting you to handle only materials well below the safety level, so I see no reason for any unnecessary fuss, Lieutenant . . ."

"Just a minute, please, Commissioner," Tony interrupted frantically. It was perfectly true that as the direct representative on Mars of the Panamerican World Federation, Bell was judge, jury, and corner cop, all rolled into one. Redress was as far away as Earth, and the road to Earth was the rocket from which Bell had the power to bar them.

"Don't you realize," Tony pleaded, "that our materials stay below the safety level only because we have a well-established monitoring procedure? If you insist on breaking into process ovens and opening crates without my supervision, Sun

Lake cannot assume responsibility for any dangerous radioactivity."

"I understand that, Doctor," Bell answered crisply. "Any handling of radioactives in my presence is obviously done on *my* responsibility, not yours. The commission, oddly enough, is supplied with its own monitors. I do not believe we will require your assistance. Carry on, Lieutenant."

NEALEY took a reluctant step forward. Choking back his anger, Tony said flatly: "In my opinion you are exceeding your authority. Your men will interfere with our processing and break open our shipment crates. Our machinery is so delicately adjusted that any kind of handling by untrained people could easily destroy it. And we've spent the last month packing our outgoing shipments for the next rocket. You know what the law is for packing radioactives. If you broke open our shipments, the rocket would be here and gone before we had the stuff decontaminated and repacked. It would be ruinous for the Colony."

He saw out of the corner of his eye that O'Donnell was unwillingly shaking his head. Bell was the law on Mars. And Bell wasn't even bothering to answer.

"At least give us a chance to look into it," urged the doctor. "Maybe we have got a bad apple. We'll find him if we do. You can't wreck us just on suspicion!"

"More than suspicion is involved here," said Bell. "The findings of the Ground Tracing Device, M-27, known as the Bloodhound, when operated by a qualified commissioned officer, are accepted as completely legal evidence in all authorized world courts."

They watched bleakly as the lieutenant began to assemble the dipole, handle, power pack and meters of the Bloodhound.

"I have a suggestion," said Brenner. "Under Title Fifteen of the Interplanetary Affairs Act—"

"No," said O'Donnell. "We don't want it."

Brenner said persuasively, "If you're clear, there's nothing to worry about."

"Title Fifteen was never meant to be applicable to a case like this," O'Donnell crossfired. "It's one of those shotgun laws, like a conspiracy count—"

"That's enough," said the commissioner. "You can't have it both ways. As long as Mr. Brenner's willing, this is your notice; I'll confirm it in writing, Under Title Fifteen of the Interplanetary Affairs Act, I advise the Sun Lake Colony that you have until the next Shipment Day to produce the marcanine thief and the stolen marcanine or evidence of its disposal. If you fail to do so, I will instruct the military to seal off Sun Lake Colony and a suitable surrounding area for a period of six months so that a thorough search can be conducted.

Lieutenant, move your men out of here."

NEALEY snapped the half-platoon to attention and marched them through the Lab door. The unmilitary figures of the commissioner and the tall, angular drug maker followed them.

O'Donnell's face was grim. "It was written in the old days of one ship a year and never revised," he said. "Sealed off" means just that—nothing and nobody in, nothing and nobody out."

"But we're geared for four ships a year," said Flexner complainingly. "Shipment Day's only three weeks off. Rocket's due in ten days, two days unloading, one week overhaul and off she goes. We'd miss the next two rockets!"

"We'd miss the next two rockets!" Tony repeated, dazed.

"Half a year without shipments coming in, half a year without goods going out!"

"He's trying to strangle us."

"It can't be legal," objected Flexner.

"It is. By the time it could be changed, the Colony'd be dead anyway."

"Even if we pulled through, we'd be poison to Earthside buyers—shipments arriving there half a year late."

"He's trying to strangle us," O'Donnell insisted doggedly.

"How many OxEn pills have we got?"

"What's Bell's angle? What's Brenner out for?"

"Bell's crooked. Everybody know's that."

"That's why they sent him to Mars."

"But what's his angle?"

Tony was still a doctor. To no one in particular he muttered, "I've got to check on the baby," and started out again on the road from the Lab to the huts with the spring gone from his knees.

CHAPTER FOUR

THE living room was empty. Someone had tidied it, straightened the wall bunk where Jim had slept, and cleaned up the dirty dishes. Anna's long work-counter was bare, all the tools and materials stored away now in cupboards underneath. That alone made the room look deserted.

Tony wouldn't talk to the women about the commissioner and his trap. He'd try not to think about it; he'd tell himself it would work out somehow in the three weeks of grace they had—

The door to the hospital was open, but no sounds came from the other side. Polly was asleep then, and Anna had gone out.

Tony drew a cup of water from the tap on the plastic keg, and set it to boil on the stove with a pinch of "coffee" makings—the ground, dried husks of a cactuslike plant that grew in some abundance on the

desert. At its best the stuff had approximately the flavor of a five-day-old brew of Earth-import brick coffee, made double strength to start with and many times reheated. It did contain a substance resembling caffeine, but to Tony it often seemed the greatest single drawback to human life on Mars.

Automatically he checked the time; the stuff was completely undrinkable if it brewed even a fraction of a minute too long. Before he put any food on to cook, he stepped into the hospital half of his hut for a look at Polly.

"Well!"

"Hello, Tony." Anna barely looked up to acknowledge his presence. She had moved the baby's basket next to Polly's bed and was bending over, peering into it.

"We were watching the baby," she unnecessarily told him, and promptly returned to that fascinating occupation.

"Just what is there to watch so hard?" the doctor demanded.

"He's . . ." Anna finally transferred her attention; she made a helpless little gesture and smiled with an irritating air of mystery. "He's very interesting," she said finally.

"Women!" Tony exploded. "Sit for hours watching a baby sleep!"

"But he's not sleeping," Anna protested.

"He's hardly slept all morning," Polly added proudly. "I've never seen such a lively baby!"

"And how would you know what he was doing 'all morning'? When I left here you were asleep yourself, and Anna was all ready to go home and do likewise. Where's Jim?"

"He wanted to go to work," Anna explained. "He was—embarrassed, I guess, about staying out. I told him I'd stay. I wasn't really sleepy anyhow."

"**Y**OU weren't sleepy? After twenty-six hours awake?" He tried hard to be stern. "So you sent Jim off to work to give him a chance to brag about his baby. You weren't sleepy, and neither was Polly, and strangely enough, neither was the newcomer here! Well, as of now, all three of you are just too sleepy to stay awake, you understand?"

Purposefully, he moved the basket to the far side of the room. What they said was true, he noticed; young Kandro was wide awake and kicking, apparently perfectly content. Not even crying. Strange behavior for a newborn.

"Come on, Anna, clear out." He put the baby down, and turned to Polly. "I'll give you ten minutes to get to sleep before I stuff some more sedative into you," he informed her. "Didn't anybody ever tell you you're supposed to be tired now?"

"All right." Polly refused to be ruffled. "He's an awfully nice baby, Tony." She settled herself more comfortably under the thin cover,

and was asleep almost before they left the room.

"Now go on home," Tony told Anna. "I'm going to make myself some breakfast. Wait a minute. Did you eat anything?"

"I did, thanks." Abruptly she turned toward him, and made a conscious effort at concentration. The abstracted look left her eyes and she was brisk and alert as usual. "What about Polly? Don't you have to go out again? Somebody should be here."

"I'll get hold of Gladys when I leave. Don't worry about it."

"All right." She smiled at his impatient tone. "You don't have to push me. I'll go." She picked up the heavy parka she had worn on her way over there, in the early morning hours the day before. At the door, she turned back. "You're still coming over for dinner tomorrow night?"

"You couldn't keep me away," he assured her.

She came back into the room, and took a ration slip from the drawer where Tony kept them. "You pay in advance, you see," she added, smiling.

"And well worth it." Tony held the door for her, a habit he never quite lost even in the atmosphere of determined sexual equality that pervaded the Colony. Not until she was gone did he remember the coffee he'd started.

It was ruined, of course, and now he'd have to do without it. Water

was too scarce, still, to waste because of carelessness. But coffee or no, he was hungry. He found a dish of barley gruel, left over from a lunch he'd cooked for himself two days ago, heated it, and spooned it down hastily. Then, with a final check to make sure Polly was really asleep, he set out for the Poroskys' house to find Gladys.

At fourteen, Gladys was the oldest child in the Colony—none of the adult members were over thirty-five years—and her status was halfway between that of a full working member and the errand-girl position her younger sister occupied. She was old enough to assist almost anybody at anything, still too young to take full responsibility for a job. Now, Tony found, she was over at the Radcliff's, sitting with Joan. It was his next stop anyhow.

II

IF THEY did have to leave Mars, it would have at least one good effect: the life of Joan Radcliff would be saved. But, the doctor reflected, she'd die of a broken heart as surely as she was dying on Mars of . . . whatever it was. His star patient, the thin, intense girl lived only for the success of the colony on Mars. And life on Mars was killing her.

When he knew what she had, maybe, Tony would know how to cure it. Meanwhile, all he could

do was make a faithful record of its symptoms and try out treatments till he found one that would work. Or until he was sure none of them worked.

It was like an allergy and it was like heart disease and it was like fungus infection where you couldn't put your finger on the parasite. The biochem boys back on Earth would lick it some day as they had licked dozens of others, but right now Tony didn't even have a name to tag it by.

Joan came down with it two days after she and her husband, Hank, arrived on the shuttle rocket. If the doctor didn't find some relief for her soon, it looked as though she would have to go back on the next one.

Tony bit hard on the stem of his empty pipe, slipped it into a pocket, and walked into the bedroom of the Radcliff house.

"How's it going?" He put his bag on the table and sat down on the edge of Joan's bunk.

"Not so good." She had to work for a smile; a good colonist is always cheerful. "I just can't seem to get settled. It's as if the bed was full of stale cracker crumbs and broken shells . . ."

She began to cough, short dry barks that rattled her thin body, feather-light on Mars, against the bed.

Cracker crumbs and sea shells?

Sometimes it seemed that the damned condition reached her

mind too. It was hard to distinguish between the delirium of fever, the depression of fatigue and confinement, the distortions of mental disease.

The spasm had passed. She battled the itch to cough again and counter-irritate her raw, constricted throat. Tony, watching, knew the guts it took. He had told her that a cough can be controlled, that she should control it because the spasms endangered her already overtaxed heart. But even before he warned her, she was fighting: a good colonist guarded her health; it was a colony asset.

Everything for the Colony. And for Henry, her husband. Joan was one of those thin, intense young people who give their lunch money to Causes. It had taken a lot of skipped lunches to get her and Henry to Mars as shareholders, Tony realized. But she could never have been satisfied with less—the non-voting position of “drop-in,” for instance. She had to identify herself with a heroic unpopular abstraction, or life wasn’t worth living.

Tony had more than a touch of it himself. All of them in the Colony did. But the doctor doubted that he had enough of it to fight against the brief, delusive relief of a coughing fit in order to get well imperceptibly sooner and go back to work for the Colony.

If she got well.

Tony opened his little black bag

ritually, his mind flashing back to the intern days when he had perfected the gesture: the grave and kindly set of face, the brooding moment of introspection over the open mouth of the learned tool chest. Too bad; too bad you couldn’t cut whatever it was out of her suffering body and bury it; or bore a hole in her and let the poison run down a drain. There was no tool waiting for him in the open bag with which to stop the girl’s own chemistry from fighting against her flesh.

JOAN whispered, “Got some magic in there for me?” A good colonist is always cheerful; the great days are ahead.

“Middling magic, anyhow.” He put the thermometer in her dry mouth, and peeled back the blanket. There were new red bumps on her arms and legs; that was one phase of it he could treat. He smoothed on ointment, and changed the dressings on the old puffy sore spots.

“That’s good,” she whispered gratefully as he took the thermometer from her mouth. “So cool!” Her temperature was up another two-tenths over yesterday’s 101.3. And the thermometer was not even moist.

Another injection, then. He hated to use them, as long as he wasn’t sure of the nature of the disease, but one of his precious store of anti-histamines seemed to give a little relief. It was temporary, of

course, and he ardently hoped it was doing no permanent damage . . . but it did shrink the inflamed watery bladder that her throat lining had become under the action of killer-enzymes. She would be able to breathe more easily now, and to sleep. It might last as long as twenty-four hours.

One more day, and by that time Hank would be back with a little of the latest Earth-developed hormone fraction.

Tony had heard that Benoway, over at Mars Machine Tool, was using it with startlingly good results for serious burns and infections. It just might turn the trick; there was no way to know till they tried.

Joan's eyes closed and the doctor sat there staring at the parchment-like lids, her chapped and wrinkled lips. Tony grimaced; she was obviously being a fool.

He rose noiselessly and crossed the room to the water jug. When he came back he spoke her name softly: "Joan?"

Her eyes opened and he held out the glass.

"Here's some water."

"Oh, thank you!" She sighed dreamily, reaching out—but she snatched her hand back. "No, I don't need any." She was wide awake now and she looked frightened. "I don't really want it," she pleaded, but her eyes never left the glass.

"Take it, drink it and don't be silly!" he snapped at her. Then,

gently, he propped up her shoulders with his arm and held the glass to her lips. She sipped hesitantly at first, then drank with noisy gulps.

"What are you trying to do to yourself? Didn't I order extra water rations for you?"

She nodded, shamefaced.

"I'm going to have some words with Hank when he comes back, to make sure you drink enough."

"It's not his fault," she said quickly. "I didn't tell him Water's so precious and the rest of you are working and I'm just lying here. I don't *deserve* any extra water."

He handed her the glass, refilled, and propped her up again.

"Shut up and drink this."

She did, with a combination of guilt and delight plain on her face.

"That's better. Hank ought to be back tomorrow with the medication from Mars Machine Tool. I'll tell him about the water myself this time, and I don't want any nonsense from you about not drinking it. *You're* a lot more valuable to the Colony than a few quarts of water."

"ALL right, Doctor." Her voice was very small. "Do you really think he'll be back tomorrow?"

Tony shrugged with calculated indecision. Mars Machine Tool was almost a thousand miles away, and allowing time for food and rest, Radcliff should be back before mid-day tomorrow. But Joan's question was so pathetically eager, he didn't

dare sound too sure. It was even harder when she opened her eyes again, while he was closing his bag, to ask: "Doctor, will it do any good, do you think? You never told me the name of it."

"Oh," he answered vaguely, "it's just something new." Just as he knew about Hank, he knew perfectly well the sixteen-syllable name of the hormone fraction. But he was afraid that Joan would know it, too, from sensational press stories, and that she would expect a miracle. The doctor was expecting only another disappointment, another possibility ruled out, another step toward the day when he'd have to break the girl's heart by ordering her back to Earth.

"I won't be able to leave anyone with you for a while," he told her as he left. "I need Gladys to stay with Polly Kandro. But remember, if you need anything, or want anything, *use the intercom. Call somebody to do it for you.* Your heart isn't in any shape for exercise."

She nodded without lifting her head from the pillow, and smiled gratefully. Things would be better, Tony thought, when Hank was back.

The sun was beating down more strongly when he stepped outside. It was past mid-morning already, and he had to get over to Nick Cantrella's: give him official clearance on the burned arm, and talk to him about Bell's threat. But there were other patients, and they

needed treatment more urgently than Nick. Better to get through with them first. Then when he got to Cantrella, they'd be able to buckle down to the quarantine problem..

CHAPTER FIVE

A YOUNG girl's head was splitting with the agony of her infected supraorbital sinus, but she was no whiner and even managed a smile.

"I've got a present for you, Dorothy," he said. "It's from a girl who was your age a couple of centuries ago. Her name was Tracy. I don't know whether it was her last or first name, but she gave it to this stuff." He held up a hypo filled with golden fluid. "It's called bacitracin. They found out that this Tracy's body fought off some infections, so they discovered how it did the trick and wrapped it up in this stuff—a good, effective antibiotic."

She hardly noticed the needle. *Misdirection is as useful to a doctor as it is to a stage magician*, he thought wryly.

A middle-aged man who should have known better was recovering nicely from his hernia operation.

"I still say, Oscar, that you shouldn't have let me fix it up. You would have been a medical marvel—The Man Who Got Ruptured on Mars. I could have had you stuffed, got you a grand glass case right next to the door at some

medical museum on Earth. Maybe a neon sign! You got a nice repair job, though I say it myself, but you're throwing away worldwide medical fame. The Man Who Tried to Lift a Lead Shipping Crate Bare-

Poker-faced, the doctor told her: "Mrs. Beyles, you're the most difficult medical problem—a maladjusted person. I wouldn't be that direct if we were on Earth, but this is Sun Lake. We can't have you



handed! I can see it now in all the textbooks. You sure you don't want me to undo you again?"

"All right, Doc," grinned Oscar, red-faced. "You made your point. If I see anybody even looking as though he's going to lift a gut-buster, I'll throw him down and sit on him until the crane arrives. Satisfy you?"

A not-quite-young woman suffered from headaches, lower back pains, sleeplessness and depression.

drinking our water and eating our food if you don't pay for it in work. What you want, whether or not you admit it to yourself, is to get off Mars, and I'm going to oblige you. If you knew what Joan Radcliff is going through to stay—Never mind. No, I will not give you any sleeping pills. If you want to sleep, go out and work until you're too tired to do anything else."

Was he right? he wondered. He

knew the woman would never believe him and would hate him forever, but it was another kind of surgery that had to be done—fortunately, not often. The woman would either change her attitude, thereby losing her illis and becoming the asset to the Colony that her strapping frame and muscles should make her, or out she would go. It was brutal, it was profit-and-loss, it was utterly necessary.

AND so to Nick Cantrella at last, thank Heaven. Heaven had often been thanked in the colony for Nick's arrival. He was the born leader, the inspired and unorthodox electronics man who hadn't garnered the sheaf of degrees needed for a halfway decent job on an Earth cluttered with bargain counter Ph.D.s.

In the Colony he had signed up as a maintenance and setup man, but spent so much of his time troubleshooting that he was finally relieved of the routine part of his work. Just recently he had been promoted to chief of maintenance, purchasing and repairs of all Lab equipment. His new dignity hadn't kept him out of trouble. He was home with a nasty chemical burn in his arm acquired far outside the line of duty.

Tony didn't know whether he was glad or sorry Nick had missed the session with Bell and Brenner. Nick could think on his feet, but it was an even chance that Brenner's

oily sympathy and Bell's open contempt of the Colony would have goaded him into thinking with his fists.

"Tony!" Nick yelled as he came in the door. "Gracey was here with the news. It's the biggest thing that ever hit Sun Lake! It'll be the making of us!"

"Let's see the arm, Combustible," said Tony dryly. "Medicine first, politics later."

Nick flumed as the doctor removed the dressing and examined the site of the burn—now just a good scar, painless, non-disabling and uncomplicated, due to quick poulticing and a heavy coat of eschar.

Tony slapped Nick on the back. "Okay, Fearless," he said. "You can go back to work. Inhale chlorine. Drop pigs of osmium on your toes. Sit on a crateful of radiophosphorus and get a boutful of geigers. Stir nitric acid with your forefinger. There's lots of things you haven't tried yet; maybe you'll like them—who knows?"

"So it splashed," Nick grinned, flexing his arm. "Damn good thing I wasn't there this morning. I would've thrown those burns out. Do you realize that this is the biggest break we've ever had? Why, man, we should have been praying for something just like this to happen. We *never* would have cut the Earth tie on our own and given up luxuries like Earthside medicine. I'm glad Bell's kicking us into it.

All we have to do is retool for OxEn." His face glowed. "What a beautiful job that's going to be! Those boys in the Lab can do anything—with my machinery, of course," he added.

"You can't do it, Nick." Tony shook his head ruefully. "Ask any of the brochem boys. I went on the guided tour through the Kelsey plant in Louisville while I was thinking over joining the Colony. It left me footsore and limping because that plant is ten stories high and covers four city blocks. They operate more than 500 stages of concentration and refinement to roll those little pink pills out of protoculture. And the first couple of hundred stages have to be remote-control sterile. There isn't as much glass on all of Mars as the Kelsey people had just in their protoculture tanks. It's out, boy. Out."

"Hell, we'll rig up something. With all the crooks on Mars, we can make something they want and swap it for OxEn across Bell's search cordon. Don't worry about it, Tony. This should have happened a long time ago. On our own!"

"You're missing something. What if we *do* catch a marcaine thief and the board and turn them over to Bell?"

NICK was thunderstruck. "You mean you think it wasn't a frameup? One of our guys?"

"We can't rule it out until we've looked."

"Yeah, it *could* happen. Well, if you'll kindly write out my medical discharge, I'll get a majority together and put it in the form of a motion that we hold a shakedown inspection of the Colony."

"There's an easier way, maybe," Tony said. "Anybody who toted that much marcaine got gowed up on the stuff, whether he knows it or not. It's micron dust—fused ampoules are about the only thing that hold it without leakage, and this was in bulk. Also, the thief might be a regular marcaine addict as well as wanting the stuff to sell."

"So," Nick grinned, "we line everybody up and just see which one does this." He went into a comedy routine of tics and twitches and strange yapping noises. "You know that won't work," he wound up soberly. "There isn't any way to smell out a markie."

"Practically no way," Tony corrected him. "That's why Brenner's a trillionaire and that's why marcaine gives stiff competition to Earthside narcotics in spite of the extra cost. The damned stuff doesn't affect you so people notice. You become an addict, you take your belt as often as you please, and you can live in your own private sweet-dream world without anybody else wiser until—blooie!—you drop dead from failure of the cardiac node to keep your heart pumping."

"You said *practically* no way,"

Nick reminded him. "What's the catch? Have you got an angle?"

"I get my electroencephalograph out and read up on the characteristic brainwave patterns of margarine users. Then I run the e. e. g. over everybody who could possibly have carried the stuff from Brenner to here. You want to line that up for me?"

Nick nodded glumly. "Sure," he said, "but you won't find any markies here. It's a frameup, I tell you . . . Hello, honey! What are you doing home at this hour of the day? What's all that junk for?"

TONY turned to see Marian Cantrella, Nick's blonde and beautiful wife, pushing her way through the door, her arms full of soft white cloth, scissors, heat-sealer, and paper patterns.

"You'll be witness, won't you, Tony, when I testify that I only left home because he didn't want me here?" Marian turned large violet eyes from the doctor to her husband and back again. "On second thought," she concluded, "you're no better than he is. *Could* either one of you big, strong men stop gaping and give me a hand with this stuff?"

Nick jumped up and relieved her of some of her bundles. "What's it all about?" He fingered the fine cloth curiously.

"Baby shirts, nightgowns, and diapers," Marian said composedly. "Are you all through pawing it?"

"Oh, for the Kandro kid." But he didn't relinquish the material. "Where'd the cloth come from?"

"I think they just ran it off." Marian took the heat-sealer from him and plugged it in to the house battery to warm up. She cleared a space on the table and laid out the patterns to study. "What's the matter?" she asked. "Something wrong with it?"

"No, it's a nice job." He brought the bolt of cloth over to the table and spread it out, then carefully pulled a thread loose. "But they should have replaced the extrusion nozzle. See that line there—there on the side—where it looks irregular?"

Tony went over to look at the thread Nick was holding up to the light. He couldn't see anything wrong with it, and Marian confessed she couldn't, either.

"It's there," Nick told them. "It means a worn nozzle. But it's not a bad job. Who did the setup?"

"For heaven's sake!" Marian exploded. "I don't know who did it! They handed it to me and said go home and make tiny garments, so I went!"

"Okay, baby," Nick soothed her. "I just thought you might know." He turned to Tony as Marian began cutting off squares from the bolt for diapers. "I don't see how they had a machine free for it," he fretted. "Every piece of equipment in the shop was scheduled for full time until Shipment— Well," he

stopped himself, "I guess it doesn't matter anyhow. From here on out we can pretty much stop worrying every time we need to use a piece of the Lab for Colony goods. The days of plenty have arrived—extra underwear and new dinner plates all around."

"Sure," the doctor agreed sourly. "All the pajamas you want—and no OxEn. Tell me, Marian, what are the women saying about this mairaine business?"

"Same as the men, I guess." She tested the heat-sealer on a corner of the first diaper, and turned the dial for more heat. "It'll blow over. Even if this shipment does get held up, it'll straighten out. Kind of a shame if we're condoned while the rocket's in, though."

SHIP tried the sealer again, gave a small, satisfied grunt, then began running it deftly along the cut edges, leaving a smooth perfect selvage behind.

"I was hoping we'd get a look at Douglas Graham," she added. "I think he's *wonderful*!"

"Hah?" demanded Nick, starting. "Oh, the *This Is* man. My rival. He should be honored to be my rival."

"What's going on?" asked Tony. "Is it a family joke?"

"Douglas Graham's a national joke," said Nick. "Now that he's going to gunth Mara, that makes him an interplanetary joke."

"Oh, the writer," Tony remem-

bered. The rocket doctor had told him last trip that Graham would be aboard the next.

"He's wonderful," said Marian. "I just loved *This Is Eurasia*. All those dictators, and the Cham of Tartary and the history, he made it sound so exciting—just like a story."

"*This Is Mara*," said Nick solemnously. "Chapter One, Page One, The Story of the Sun Lake Colony, or, A Milestone in the History of Mankind."

"Do you think he really will write us up?" asked Marian. "I mean if that silly mairaine business doesn't keep him away?"

"No, pet. We'll be ignored or maybe he'll take a few digs at us. His books run first as serials in *World Welfare*, and *World Welfare* isn't interested in co-op colonists. It is interested in Pitco #3 over the hill, I'll bet you, by the way Pitco advertises. He'll probably play up all the industrial colonies as big smash-hits for free enterprises and not mention things like the Pitco red-light house."

MARIAN'S lips tightened. "I don't think it's *decent*," she said.

"Right," agreed Nick soberly. "I'll tell Madame Rose tonight. Haven't been over for days. I'll tell her my wife doesn't understand me and doesn't think her girls are decent. Want to come along and make a night of it, Tony?"

"Ump," said Tony. If he was any judge, Marian's sense of humor didn't go that far.

"That's not what I meant!" she cried indignantly. "I meant it wasn't decent for him to hide things like that and—oh, you're joking! Well, I don't believe he would do it! I've read his books and they're good."

"Have you got any of Graham's stuff around?" Tony asked hastily. "I don't think I ever read any."

"I shouldn't take time out," said Marian, a little sulkily, "but—"

SHE put down the sealer and shoved Tony off the trunk he'd been sitting on. A considerable quantity of wool socks and underwear turned up before she hit the right level. She handed over a conventional onionskin export edition.

Tony read at random:

The Cham's black eyes met mine with a gaze hypnotic in its intensity. The corners of his mouth drew up in a smile. The Cham spoke, and the front of his plum-colored silk robe embroidered with three-toed dragons in gold and silver thread rose and fell as he gestured for emphasis.

These are the words of the man who rules over the twenty-five million souls that hold the lifeline between America's frontier on the Yang-Tse Kian River and her allies in the Middle East: "Please convey

to the people of your country my highest esteem and warmest assurances that the long peace between our nations shall never be broken without cause by me."

The significance of this—

Tony handed the book back. "I don't think I've been missing much," he said.

"When you've read one, you've read 'em all," Nick agreed. "All those gunthers are the same."

Marian was still digging through the trunk, fascinated at the forgotten things she was turning up. It was surprising how little used were most of the items they had found essential to include in their limited baggage when they left Earth.

"Here's something," she laughed. "I used to read it back on Earth, and I thought it would be so useful here . . ."

She held out an onionskin pamphlet titled in red; *The Wonders of Mars*, by Red Sand Jim Gannata, Interplanetary Pioneer.

"I remember standing for the longest time with an extra lipstick in one hand and this in the other, and they both weighed exactly the same, and I decided . . ." She broke out in another peal of laughter. "I decided to be *practical* and take *this*. What I wouldn't give for that lipstick now!"

Nick took the book from her and riffled through the pages with a reminiscent smile. "It's terrible,

Tony," he said. "Got these chapter headings: 'Mining for Emeralds,' 'Trapped in a Sandstorm'—Red Sand Jim was as clear as the air on Earth was as clear as the heart of a Martian sandstorm—'Besieged by Brownies in the Rimrock Hills.'"

"What?" demanded the doctor, incredulously.

"'Besieged by Brownies in the Rimrock Hills.' If you don't believe me, look. The Brownies, it says here, were a constant menace to intrepid interplanetary pioneers like Red Sand Jim because they killed people and stole their babies and things like that. They didn't often see one—"

"Naturally."

"NATURALLY, Doctor, naturally. But they were little people who didn't wear shoes or clothes, it says here—which reminds me." He closed the book. "I was out at the caves yesterday—took a ride with one of the prospectors. We've never really looked into the caves, and I had nothing better to do while you were teaching me safety precautions, so I wandered around some, and found kids' footprints in the entrance to one of them."

"They take the goats out there to graze sometimes," Tony said.

"That's not it. Looks like they've been going barefoot, and I don't think they ought to be allowed—"

"They certainly shouldn't!" Mattian was indignant. "Why, they

could hurt themselves. And they shouldn't be allowed in those caves either."

"They're not," Tony said grimly. "They have strict orders to stay away from the caves. But I never thought they'd be screwy enough to try going barefoot. I'll have to tell them about it."

"Tell them good," Nick urged him. "There's a lot of rock out there, and a lot of dangerous surface salts."

"I wish I knew some way to make it stick," the doctor said, worriedly. "Once those kids get a notion in their heads—if they still hang around the caves after listening to old man Learoyd's horror stories—I don't know."

"Don't take it so hard." Nick couldn't stay serious long. "Maybe it wasn't the kids. Could be it's Brownies."

"Ve-ry funny. I'll pass the word to the mothers that there shouldn't be any barefoot boy stuff on Mars. I've got enough trouble without frostbitten toes, lacerations and mineral poisoning."

"You better hope they're Brownie prints, Tony. That'd be easier to handle than teaching our pack of kids."

"Look who's talking! I'll thank you to line up that vote on an e.g. test for marcamine now while I dig up my medical references. Also—" he got up briskly—"if there's more trouble coming, I better take care of myself while I can."

Lunch'll be all gone if I don't get there soon."

Tony had small zest for the communal meals shared by most of the unmarried members of the settlement. Pooling rations and taking turns at the work did make it easier to get decent meals; but the atmosphere was, inevitably, one of noisy good-fellowship. The doctor would have preferred a quieter and more restful arrangement. He thought wistfully for a moment of the comradeship that existed between Nick and his wife. On second thought, it would hardly be worth it, having to get married in order to have his meals at home.

CHAPTER SIX

FORTY years in the life of a planet is nothing at all, especially when the planet is ancient Mars. It had been that long since the first Earth rocket had crashed at the southern apex of *Syris Major*—and remained there, a shining, rustless memorial with only the broad fractures in its fuel tanks to tell its story to those who came after.

Forty years, almost, since the first too-hopeful colonists followed, three thousand doomed souls. Their Earth-bred bodies, less durable than the flimsiest of their constructions, were already rotted to the skeletons when a belated relief ship came with the supplies without which they had starved to death.

Forty years, now, of slow growth but rapid change, during which a barren world had played host to, successively, a handful of explorers; a few score prospectors and wanderers-at-large; a thousand or so latter-day homesteaders, with their lean, silent women; and finally—after OxEn—the new industrial colonies, none of them more than five years old.

The explorers had disappeared: gone back to Earth to lecture and write, or blended completely into the Martian scene; the prospectors and frontiersmen, most of them, had died; but the colonists, determined to stay on, drew fresh blood continually from the lifeline at Marsport—the quarterly rockets from Earth.

Sun Lake City Colony, alone among those who had come to Mars, wanted nothing more than to cut, once and for ever, that vital tie with Earth. But it was too soon, still too soon; the Colony was not yet strong enough to live, if the umbilical cord were severed.

And the colonists knew it. After lunch they gathered in the Lab, every last man, woman, and child. Tony rose from the black box of the electroencephalograph to count heads.

"We're one over," he told Nick. "Polly's in the hospital, Joan's home, Hank's at Mars Machine Tool or on his way back. Tad's on radio shack. Who's the spare?"

"Learoyd," said Nick. "And I've

got Tad messaging Machine Tool to confirm Hank's whereabouts for the last four days."

"Okay. I'll get Tad later."

A whiskey man who looked as though he was pushing 90 stormed up to the doctor.

"It ain't your business whether I take a sniff of marcaine now and again and it ain't for you to say I stole any hundred kilos if you do find I use it once in a way. Bunch of greeners!"

"Calm down, Learoyd," sighed the doctor.

"Greener!" taunted the old-timer.

"Call yourself Marsmen!"

"You can call us anything you want, Learoyd," said the doctor. "Only we've got to straighten this thing out. When did you last take marcaine? It won't—"

"You don't even know where you are!" quavered the old man. "Lake-us Sole-us, my eye! You're right on the edge of Ryan's Plain and you don't even know it. He was here first and he had a right to name it! Old Jim Ryan . . ."

PATIENTLY Tony tried to explain: "Brenner says somebody stole the hundred kilos of marcaine two days ago. It could have been any of us. You were around, so we've got to be able to tell Commissioner Bell—"

"Another greener—a politician grocer. The Law on Mars!" Learoyd's voice was heavily satirical. "When there was twenty, thirty of

us, we didn't need no law; we didn't go around thieving! We got here ahead of you all, you and the farmers, too. What for did you have to come crowding in?"

"W^hen did you take that last belt of marcaine?"

The old pork-and-beaner sighed brokenly. "It was more'n two years ago. I ain't got money for marcaine. I ain't a panhandler and I do a good job hauling for you, don't I?"

"Sure, Learoyd."

"Then why do you have to come bothering me? We was here first! He collapsed into the chair by the black box, grieving for the past of the red planet, before this damn OxEn, when Marsworthy lungs were a man's passport to adventure where no man had ever been before, where a mountain range was your mountain range and nobody else's, where Jim Ryan died in the middle of great, flat, spreading Ryan's Plain, starved to death out there when his halftack broke down.

Learoyd chuckled, not feeling the electrodes they were putting to his head. He'd got off a good one—five years on Mars and these ten greeners landed. They wanted to be heroes, the little greeners, but he told them. He sure told them.

"Call yourselves Marsmen? In six months half of you'll be dead. And the other half'll wish they was."

Jim Granata was in that bunch—a sly one, pumping him, making

notes, making sketches, but he wasn't a Marsman. He went back to Earth and made him a pot full of money with books and—what did they call it?—Granata's Combined Interplanetary Shows. Little Jim, he called himself Red Sand Jim Granata, but he was never a Marsman.

The Marsmen came first. Sam Welch surveyed Royal Range, the Palisades. Amby McCoy—he got killed by eating Mars plants; they found him with his food run out, curled up with the agony of poisoning. A thousand dollars a day they got then, when a thousand dollars was a thousand.

It was in '07 he told off those greeners twenty-eight years ago. Only one rocket every couple years then, and sometimes they didn't get through. Jim Granata, he never set foot on Mars after '18 with his money and all; he wasn't a Marsman. They were here first. Nobody could take that away from them.

Sam Welch, Amby McCoy, Jim Ryan. Why not die too? Learoyd wondered bitterly. A thousand dollars a day they paid him when a thousand dollars was a thousand, and look at him now. Where had it gone? Why was he living by hauling dirt for the greeners when he had been here first? His lip trembled and he wiped his mouth.

SOMEBODY was shaking his shoulder and saying: "That's all, Learoyd. You're in the clear. Nothing to worry about."

The old man slouched through the crowd and out of the Lab, shaking his head and muttering what sounded like curses.

Tony hadn't been very far from hoping that Learoyd would turn out to be the thief. The law would have to go easy on him and it would clean up the Colony's problem.

Colonist after colonist seated himself in the chair and cleared himself by revealing marcaine-negative brainwaves to the e.e.g. Tony didn't dare to think of what it meant. The last of them, the boy from the radio shack, was relieved to take his turn.

"That's the lot," Tony reported to Nick when young Tad, too, was cleared by the machine, and had gone back to his job.

Castrella refused to share the doctor's gloom. "It's just what we needed," he insisted, smacking his fist into his palm. "Face it, man. There isn't any marcaine thief. Bell thinks he can run us off Mars by cutting off our import-export. Let them cut us off! We'll barter for OxEn. We'll damn well do without the Earthside enzymes and immunizers. We'll get tough with Mars, lick it on its own ground! We'll have to eventually; why not right now?"

"I don't know, Nick. I think you're going too fast," Tony demurred. "Look at old Learoyd—he's *as*, only a little worse."

The pork-and-beaners imported their food, clothes, fuel, and look

at them!" Nick insisted, "They failed. They didn't strike roots. They didn't adapt!"

"I don't know, Nick," the doctor repeated unhappily. "I've got to go see Polly and the baby now."

II

TONY lugged the e.e.g. back to his hospital-shack and found Anna holding the hand of a white, trembling, terrified Polly. Polly's other arm was around the baby, clutching the red-faced little thing as if it were on the edge of a precipice.

Without a word he took the child, snapped on his stethoscope and sounded its heart, which was normal. In spite of the red-faced creature's squirming, the minute oxygen mask was in place.

Baffled, he replaced the baby and demanded of the women: "What's wrong?"

"I have to work," said Anna abruptly. She patted Polly's hand and slipped out.

"I saw something," Polly whispered. Her eyes were crazy.

Tony sat on the side of the bed and picked up the hand Anna had been holding. It was cold.

"What did you see, Polly?" he asked kindly. "Spots on the baby? A rash?"

She disengaged her hand and pointed at the window in line with the bed and two meters from its foot.

"I saw a brownie. It wanted to steal my baby." She clutched the child again, not taking her eyes off the window.

Normally Tony would have been amused and not shown it. Under the strain of the day, he fought down a violent anger. The little idiot! At a time when the whole Colony was in real and deadly peril, she was making no effort to distinguish between a dream and reality.

"You must have drowsed off," he said, not as harshly as he felt. "It was just a nightmare. With your history, of course you're afraid that somehow you'll lose this baby too. You've heard all this pork-and-beaner and homesteader nonsense about brownies, so in your dream your fear took that form. That's all there is to it."

Polly shook her head. "Gladys was staying with me," she recited monotonously, "and she had to go to that test in the Lab and she said she'd send somebody who'd been tested as soon as she got there. Just when I heard the door close, this face came up outside the window. It was a brownie face. It had big thin ears and big eyes, with thin eyebrows, and it was bald and leathery.

"It looked at me and then it looked at my baby. I screamed and screamed but it just looked at my baby. It wanted to steal my baby. And then it got down below the window sill just before Anna came

in. Even after she put my baby here with me, I couldn't stop shaking."

Anger was getting the better of him. "Do you realize that your story is perfectly ridiculous if you insist on claiming it really happened, but perfectly logical if you admit it was a dream?"

SHE began to cry and hug the baby. "I saw it! I saw it! I'm afraid!"

Tony relaxed; tears were the best medicine for her tension. To help them along, he rose and got her a sedative and a glass of water.

"Take this," he said, putting the capsule to her mouth.

"I don't want to go to sleep!" she snuffed. But she swallowed it and in a minute or two felt under her pillow for a handkerchief.

When she had wiped her eyes and blown her nose, the doctor said quietly: "I can *prove* it was a dream. The brownies are just the kind of thing the pork-and-beaners and the homesteaders would invent to scare themselves with. And the myth got exploited in the Sunday supplements and on TV, of course. But there can't be any brownies because there isn't any animal life on Mars.

"We've been exploring this planet up, down and sideways for 40 years now. We found a weed you can make dope out of; we found you can make liquor out of Mars plants; we found a lot of ores

and minerals. But not one trace of animal life. Think of it, Polly—40 years and *nobody has found any animal life on Mars!*"

She reasoned, a little fuzzy with the sedative: "Maybe brownies could stay out of people's way. If they're smart they could."

"That's right. But what did the brownies evolve from in that case? You know that if you have a higher form of life, it evolved from a lower form. Where are all the lower forms of life that evolved into brownies? There aren't any. Not so much as one puny little amoeba. So if there's no place the brownies could have come from, there are no brownies."

Her face relaxed a little, and Tony talked on doggedly. "You got a bad scare and no mistake. But you scared yourself, like the homesteaders that started this nonsense." A sudden notion struck him. He put it in the urgent file, and went on. "You were afraid your bad luck would catch up with you and take your baby away. This is Mars, so you symbolized it as a brownie. The vividness doesn't mean anything—you probably saw a scary picture in the papers of a baby-stealing Martian brownie and stored it in your memory, and out it popped at the right time."

Polly cracked a sleepy smile and said, "I'm sorry," and closed her eyes.

She'll be all right, thought Tony, *and it's a good thing it turned up to*

*remind me of the homesteaders—
Thaler? Toller?*

Whoever they were, the old couple on the wretched "farm" to the South, Toller, that was, right. He hadn't seen them for a year, but he was going to see them today.

Anna was in the other, residential, half of the shack. "I think I talked her out of it," he said. "You'll stay here?"

"Yes. Where are you off for?" He was lugging the c.c.g. out again.

"That old couple, the Tollers. I wouldn't put the maraine theft past them and they're close enough to our general area. Before the last dozen Sun Lakers arrived, I had enough time on my hands to run out and see how they were coming along. If I just tell them it's time for another checkup, I'm pretty sure I can persuade them to give me a brainwave reading. That may break the case."

He strapped the black box to his bicycle and set off.

iii

THE Tollers were a different type from old Learoyd, and driven to Mars by a different urge. Learoyd had fancied himself an explorer and adventurer who would make a sudden strike and, after a suitably romantic life of adventure, retire to his wealth.

The Tollers laid the longer, slower-maturing plans of peasants: *In two years, when I have saved up*

seven winning three groschen, I will buy Bauer's bull calf, which will service the cows of the village; Fritz by then will be big enough to take care of the work, Zimmerman, the drunkard, will go into debt to me for service of his cows and pledge his south arrip, so Fritz need not marry his Eva. Schommacher's Gretel has a barelip but there's no escaping it—his west pasture adjoins mine . . .

It hadn't worked out for the Tollers—the steady, upward trend of land values, the slow improvement of the soil, the dozen sons and daughters to work it, the growing village, town, city—

All that happened was they had scratched out a living, had one son and gone a little dotty from hardship. Both had Marsworthy lungs. If she had not, Mrs. Toller would, like hundreds of other wives, have lived as matter-of-factly in an oxygen mask as her many-times-removed great-grandmother had lived in a sunbonnet.

The husband, by now, was stone-blind. Data from him and hundreds of others had helped to work out the protective shots against ultraviolet damage to the eyes, a tiny piece in the mosaic of research that had made real colonization at all possible.

Still, Tony dreaded visiting them. He didn't see their mangy goat, last of a herd, that had been browsing wiregrass on his last trip. They must have slaughtered it to sug-

ment the scanty produce of their heavily manured kitchen garden.

He knocked on the door of the hut and went in, carrying the black box. Mrs. Toller was sitting in the dark, crammed little room's only chair. Toller was in bed.

"Why, it's Doctor Tony, The-ron!" the old lady explained to her husband. Not bad, thought Tony, since he hadn't been able to remember *their* names in a flash.

"Say hello to Doctor Tony, The-ron. He brought us the mail!"

Mail? "No, Mrs. Toller—" he began.

The old man started out of a light doze and demanded: "Did the boy write? Read me what he wrote."

"I didn't bring any mail," said Tony. "The rocket isn't due for two weeks."

"Junior will write in two weeks,



Theron," she told her husband. "These are our letters to *him*," she said, producing three spacemailers from her bodice.

Tony started to protest, thought better of it, and glanced at them. All three were identical.

Our Dear Son,

How are you getting along? We are all well and hope you are well. We miss you here on the farm and hope that some day you will come back with a nice girl because one day it will all be yours when we are gone and it is a nice property in a growing section. Some day it will be all built up. Please write and tell us how you are getting along. We hope you are well and miss you.

Your Loving Parents

ON THE other side, the envelope side of spacemail blanks, Tony saw canceled fifty-dollar stamps and the address to "Theron Pogue Toller, Junior, R. F. D. Six, Texarkana, Texas, U. S. A., Earth." The return address was: "Mr. and Mrs. T. P. Toller, c/o Sun Lake City Colony, Mars." Stamped heavily on each was a large, red notice: "DIRECTORY SEARCHED, ADDRESSEE UNKNOWN, RETURNED TO SENDER."

The old man croaked, "Did the boy write?"

"I've come to give you a physical

checkup," said Tony loudly, oppressed by the squalid walls and the senile dementia they housed.

"Isn't that nice of Doctor Tony, Theron?" asked Mrs. Toller, tucking the letters back into her dress. But the old man had fallen asleep again.

Tony clipped the electrodes on and joggled Toller awake for a reading. *Marsaine-negative*.

"We came in such a beautiful rocket ship," rambled Mrs. Toller as he put the e.e.g. on her. "It was quite an adventure, wasn't it, Theron? We were so young, only 23 and 24, and we sold our place in Missouri. It was such a lovely rocket we came in, a little one, not like the ones today, but this was before Mars got built up. We had quite a fright when one of the steering jets went bad while Mars was ahead, just like a big moon, and the poor crewmen had to go outside in their suits. It was quite an adventure, wasn't it, Theron?"

"I often wonder, Doctor Tony, whether Junior has ever been back to the old place in Missouri. We had him our first year here, you know; he's 19. He wanted to see the Earth, didn't he, Theron? So when he was 17 we went all the way to Marsport to see him off. It was quite an adventure, wasn't it, Theron? And he sent us his address *right away*—"

Marsaine-negative brainwave.

He was too sickened to stay, and the birdlike chatter of Mrs. Toller

never stopped as he said good-by and wheeled off to Sun Lake.

Their horrible deterioration during the past year to senility in the mid-forties answered Nick Cantrella's plan to establish the colony immediately as self-sustaining.

It simply couldn't be done. It was bad enough now—the damn dull, monotonous, primitive, regulated existence of the colony. How long was it now since he'd eaten an egg? How long since he'd drunk a cup of coffee, *real* coffee, with cream and sugar? How long since he had worn underclothes or had a real bath? How long since he'd had a highball after a good day's work? Or smoked his pipe without frantic puffing to keep it lit in the thin, cold, oxygen-poor air?

But life on Mars without even the minimum of supplies, immunization and adaptation shots was out of the question. If they asked his medical advice, his answer would have to be:

"If we are forbidden Earth supplies we must go back to Earth."

TONY groped in his pocket for his pipe, and clenched it between his teeth. All right then, he thought, go back to Earth—go back and get yourself a decent cup of coffee in the morning. Go back—

Back to what? To a clinic in an industrial town where he could give slapdash time-clocked attention to the most obvious ills of men, women, and children whose fears

and deprivations began in the womb and ended only in the grave? Cure a kid's pneumonia, then send him back to the drafty apartment again? Fix up an alcoholic factory-worker, and return him to the ugliness that will put him on dope or in the schizo ward next year? No, he'd tried the clinics already, and they wouldn't do.

Back to the office, maybe? An office like the one he'd had, briefly, in the penthouse of a New York apartment building. Take your patients one at a time, give them plenty of attention, they're easy to cure if you understand them—the ulcers and piles and false pregnancies, the thousand-and-one diseases of the body that grew out of the prevailing disease of the mind—fear.

Go back? He bit hard on his empty pipe. It would be consoling to stand again on Earth, and fill his pipe and light it, puff clouds of smoke—while he waited for the crowded, psychotic planet to blow itself up and put an end to man once and for all.

CHAPTER SEVEN

HANK RADCLIFF shook Tony awake a little before dawn.

"I got the stuff, Doc," he grinned. "Just came in on foot from Pitco. The half-track broke down twenty miles out of Mars Machine on the way back, and I bummed a

side on a Pittco plane headed this way. The half-track's still at Rolling Mills and—"

The doctor shook his head groggily and thought of giving Hank hell for the abrupt awakening. But it was hard to stay mad at him, and Tony would have been roused by his alarm clock for the Lab check in a quarter-hour anyway. Did the Lab check matter? Did the medication for Joan matter? No. They were all heading back for Earth before long.

"Make me some coffee," he growled. "One minute by the clock."

HE stretched, rolled out, shucked his pajama tops and gave himself a sponge bath with a cup of water that would mean one less cup of coffee for him today. Some mornings he just couldn't stand the feel or stink of methyl skohol.

Shivering, he gulped the coffee and pulled on pants, parka and sand boots. "Let's see the stuff," he said. "Did Benoway give you a letter or note for me?"

"Oh, sure, I almost forgot." Hank handed over an ampoule and an onionskin. The note from the Mars Machine Tool physician said:

Dear Hellman:

Here is the T7-43 Kelsey you requested by radio message. Re your note by messenger, sorry to tell you symptoms completely unfamiliar to me.

Sounds like one of the cases any company doc would ship back to Earth as soon as possible. The T7-43 has worked wonders in heat burns here and have seen no side reactions. Please let me know how it comes out.

In haste,

A. Benoway, M. D.

Tony granted and beckoned Hank after him as he picked up his physician's bag and went out into the bitter morning cold.

"Did you say you *walked* from Pittco?" he asked Hank, suddenly waking up.

"Sure," said the youngster genially. "It's good exercise. Look, Doc, I don't want to get out of line, but I couldn't help noticing that you're building up kind of a bay window yourself. Now it's my experience that those things are easier *not* to put on than to take off—"

"Shh," said Tony as they stopped at the Radcliff shack. They slipped in and Tony filled a needle with the new Kelsey drug. "Stay in the background until I get this over with and motion you in, Hank."

He awakened the girl.

"Here's the new stuff, Joan," he said. "Ready?"

She smiled weakly and nodded. He shot the stuff into her arm and said: "Here's your reward for not yelling." Hank duly stepped forward, switching on a light in her eyes that did Tony's heart good.

BREAKFAST was fried green Mars beans and "coffee"—hearable, perhaps, under ideal conditions, but completely inedible in the gloomy atmosphere around the big table this morning. Tony gulped down the hot liquid, and determinedly pushed away his beans, ignoring the pointed looks of more righteous colonists, who declined their plates stubbornly under any circumstances.

The Lab radiation checked out okay; no trouble there at least this morning. After a meticulous clean-up, he visited Nick Cantrella in the hole-in-the-wall office at the back of the Lab.

"How's it look, now you've had a night's sleep on it?" Nick demanded. "You still want to throw in the sponge? Or are you beginning to see that we can lick this damn planet if we only try?"

"I can't see it," Tony admitted. Soberly he told the other man about his visit to the Tollers. "And look at Old Man Learoyd," the doctor added. "He can't be much past 60 and that's stretching it. I know he came here when he was twenty-one; at least, that's what he says—so how old can he be? But I gave that man a physical checkup a few months back, and, Nick, he not only *looks* like an ill-preserved octogenarian, but if I didn't know otherwise, I'd stake my medical reputation on his being close to ninety."

Nick whistled. "As bad as that?"

"What do you expect? Chronic vitamin deficiencies, mineral deficiencies, not enough water, never-ending fatigue from never-ending work—you pay high for trying to live off the country. More than it's worth."

Half to himself, Nick said: "Six months. We lose our commercial contacts, we pay forfeits that eat up our cash reserve—what if we just go to the buyers and tell them what happened?"

Tony started to answer, but Nick answered himself: "It won't work. They won't dare place another order with us because they'd be afraid it'd just happen all over again. And we haven't got the funds to sweat it out until they forget. Tony, *we're walked up!*"

"There's still a search."

"Hell, you know none of our people took the stuff."

"Let's have a council meeting. I want a search."

Nick, Tony, Gracey and Mimi Jonathan held one of their irregular conclaves in the doctor's hut. Gracey was fiercely opposed to a shake-down check of the homes and belongings of the colonists, swearing that it was a frameup by Brenner and Bell. The other three outvoted him, loathing to invade the pitifully small area of privacy left to Sun Lake people, but not daring to leave a possibility uninvestigated.

"I suppose," grunted Gracey, "that when you find there isn't any

marcaine in our trunks, you'll tear the Lab apart looking for it."

"If we have to, we may," said Tony, poker-faced, but sickened at the memory of what isolation from the life-giving flow of materials from Earth had done to the Tollers. "I've had some nasty jobs before this." He thought of how he had lanced the swollen ego of Mrs. Bayles, the neurotic, and how she must hate him for it—an ugly thought.

By mid-morning, Mimi had the shakedown under way. Tony settled himself in the radio shack, firing message after message to Commission headquarters at Marsport, trying to get through to Lt. Nealey. The operator at Pittco who relayed from Marsport telefaxed the same reply to the first four messages: "UNAVAILABLE WILL RELAY MESSAGE END CORPORAL MORRISON COMMISSION MESSAGE CENTER."

On the fifth try, Nealey still had not been reached—but Bell had.

This time the reply was: "LIEUTENANT NEALEY UNAVAILABLE MY ORDERS. UNDER NO CIRCUMSTANCES GROUND TRACING DEVICE M-27 LENT FOR PRIVATE USE. REMINDER LIMITED MARS MESSAGE FACILITIES TAXED YOUR PRIVILEGE REQUESTS. REQUIRE CEASE IMMEDIATELY END HAMILTON BELL, COMMISSIONER P. A. C."

Gladys Porosky, the operator on duty, piped indignantly: "He can't

do that, can he, Doctor Tony? The relay league's a private arrangement between the colonies, isn't it?"

Tony shrugged helplessly, knowing that Gladys was right and that Bell's petulant arrogance was a long stretch of his administrative powers—but due process was far away on Earth, for those who had the time and taste for litigation and the cash reserves to stick it out.

Gracey joined him in the but long enough to say bitterly, "Come and see the loot we accumulated."

Tony went out to stare unhappily at the petty contraband turned up by the humiliating search: some comic books smuggled in from Marsport, heaven knew how, by a couple of the youngsters; some dirty pictures in the trunk of a young, unmarried chemist; an unauthorized .32 pistol in the mattress of a notably nervous woman colonist; a few bottles and boxes of patent medicine on which the doctor frowned, a minute quantity of real Earthside coffee kept to be brewed and drunk in selfish solitude.

By mid-afternoon this much was certain—any marcaine hidden in the Colony was not in a private home.

The Lab would have to be searched next.

iii

IT WAS like going into a new world, to escape from the doomed, determined optimism of the search squad and council mem-

bers, back to the cheerful radiance that inhabited the hospital. Tony stood in the doorway, studying the family group across the room—father and mother thoroughly absorbed in each other and in the tiny occupant of the white-painted wicker basket that served as hospital bassinet.

It was still hard to believe the delivery had gone so well. Tony wondered again, as he had so often in the preceding months, what could possibly have gone wrong with all the previous attempts, before they came to Mars.

There had been frequent conceptions; six known miscarriages, and an unknown number of first-month failures. A series of experts back on Earth had searched for the reason, and confessed failure. There was nothing wrong with Polly organically, and microscopic examinations failed to show any deficiency in her or in Jim. With that history, Tony had been prepared, right up to the last minute, for trouble that never materialized. It was still hard to believe that their success, his and Polly's, could have been so easily achieved.

"He's awake again!" Polly hadn't quite made up her mind whether to be proud or worried. "He slept for a little while after you left," she explained, "but then he started crying and woke himself up. You should have seen how mad he was—his face was so red!"

"He's quiet enough now." Tony

went over and stared down thoughtfully at the small circle of face, half-obscured by the oxygen mask. Certainly there was no sign of ill health. The baby was a glowing pink color, and his still-wrinkled limbs were flailing the air with astonishing energy. But a newborn baby should sleep; this one shouldn't be awake so much.

"It's possible he's hungry," the doctor decided. "Hasn't he cried at all since he woke up?"

"Oh, a little, every now and then, but if you turn him over, he stops."

Tony went over and scrubbed his hands in the alcohol basin, then came back and surveyed the baby again. "I think we'll try a feeding," he decided. "I've been waiting for him to yell for it, but let's see. Maybe that's what he wants."

"But—" Jim flushed and stopped.

HIS wife broke into delighted laughter. "He means my milk isn't so yet," Polly said to the doctor; and then to Jim, "Silly! He has to learn how to nurse first. He doesn't need any food yet. And the other stuff is there—what do you call it?"

"Colostrum," Tony told her. He removed the baby from the crib, checked the mask to make sure it was firmly in place, then lowered the infant to his mother's waiting arms.

"Just be sure," he warned her, "that the mask doesn't slip off his nose. There's enough area around

his mouth exposed so he can feed and breathe at the same time."

THE baby nuzzled against her for a moment, then spluttered furiously, turned a rich crimson and spewed back a mouthful of thin fluid. Hastily Dr. Tony removed the infant, patted and held him until the choking fit stopped and restored him to his basket.

Polly and Jim were both talking at once.

"Hold on!" said the doctor. "It's not the end of the world. Lots of babies don't know how to feed properly at first. He'll probably learn by the time your milk comes. Anyhow, he'll learn when he needs it. Babies don't stay hungry. It's like the oxy mask—he breathes through his nose instead of his mouth because the air is better. We don't have to cover up his mouth to make him do it. When he needs some food he'll learn what his mouth is for—fast."

"But, Doc, are you sure there's nothing wrong with him? Are you sure?"

"Jim, in my business, I'm never sure of anything," Tony said mildly. "Only I've never yet seen a baby that didn't find some way to eat when it wanted food. If your pride and joy won't take the breast, we'll get Anna to whip up some bottles for him. It's as simple as that."

Or not so simple—

George and Harriet Bergen's eight-month-old Loretta, conceived

on Earth but born at Sun Lake, was still feeding from the breast. Loretta would be weaned not to milk but to the standard Colony diet plus vitamin concentrates when the time came. It was what the older children ate; they had forgotten what milk tasted like.

There were milch-goats, of course, and some day there would be milk for everybody in the Colony to drink. But to make that possible, it was necessary now to allocate all the milk produced by the herd to the nourishment of more goats, to build up the stock.

It was hard enough to keep the herd growing even with best of care. Yaks, at first, had seemed like a better bet for acclimatization to the Martian atmosphere, but they were too big to ship full-grown, and so far no young animals had survived the trip. So the Colony had brought over three pairs of tough kids, and bred them as rapidly as possible. Half the newborn kids still died, but the surviving half needed every bit of milk there was. Still, if necessary, a kid would have to be sacrificed, and the milk diverted to the baby.

Tony pulled himself out of the useless speculation with a start of dismay. There was no sense planning too far ahead now; Bell might solve this problem for them, too.

"Anything else you want to know before you go home?" he asked. "Have any trouble with the mask?"

"Anna checked us out on that,"

Jim told him. "It seems to be simple enough."

"Where is she? In the living room?" Tony started toward the door.

"She went home," Polly put in. "She said she had a headache, and when Jim came in she showed us about the mask again, and then went . . ."

"Hi, Tony. Can I see you a minute?" Marian Cantrella stuck her head through the outside door to the hospital. Tony turned and went out with her.

IS SHE ready to go?" Marian wanted to know.

"Since this morning, really. But the damn search—how's their place? Did anybody get it back in order?"

"I just came from there," Marian nodded. "We've got it all fixed up and the new room's all done. The walls are still a little damp. Does that matter?"

"It'll dry overnight," Tony reflected. "They can keep the baby in the room with them till then . . ."

"Polly must be dying to get home," Marian broke in.

"I guess she is. Okay," he decided, "but it'll have to be right away. In another hour, it'll be too cold for the baby to go out."

"Right." She started away, and Tony was about to open the door when she turned back. "Oh, I almost forgot. Is it all right for Hank to take Joan out to watch? I was

talking to her before, and she felt so left out of everything . . ."

"I guess so." He thought it over and added, "Only if she's carried, though. Maybe Hank can fix up a tote truck from the Lab for her to ride on. I don't want her to use up what strength she has."

"I'll fix it," Marian promised. "I think it would mean a lot to her." Her golden curls shook brightly around her head as she ran off down the street.

Tony went back into the hospital. "Guess it's time to get you folks out of here," he told the Kandros. "Place is too cluttered up. I might need this space for someone who's sick."

Polly smiled up at him from the chair where she had been sitting for the last hour. "I don't know what I can wear," she worried happily. "The things I came in would fall right off me, and I can't very well go out this way. Jim, you better . . ."

"Jim," Tony interrupted, "You better get some sense into that wife of yours. You'll go *just* the way you are," he told Polly, "and you'll get right into bed when you get there, too. You've been up long enough for one day."

"*Just* the way I am?" Polly laughed, poking her bare toes out from under her bathrobe.

WHILE Jim helped her with her sandboots and parka, Tony wrapped the baby for his first

trip outdoors. They were ready quickly, but Marian had been even quicker. When they opened the front door, they were confronted by a crowd of familiar faces. It seemed as if all of Sun Lake City Colony's eleven dozen residents had crowded into the street in front of the doctor's house. They were determined, apparently, that whatever happened next week, the Kandros' homecoming would not be spoiled today.

"I suppose you all want to see the baby? All right," Tony told them, "but remember, he's still too young for much social life. I don't want you to crowd around. If you'll all spread out down the street from here to the Kandros' place, everybody can get a look."

Together, Tony and Jim eased Polly into the rubber tired hand-truck that did double duty as a hospital stretcher. They placed the baby in her arms, and adjusted the small portable tank for the oxy mask at her feet. Then they started slowly down the long curved street, stopping every few yards along the way for someone who wanted to shake Jim's hand, pat Polly on the shoulder, and peer curiously at the few square inches of the baby's face that were exposed to the weather.

The doctor fretted at the continual delays; he didn't want Polly or the baby to stay out too long. But after the first few times, he found he could speed things up by saying meaningfully, "Let's let them get *home* now." As the small

party progressed down the street, they collected a trailing crowd. Everyone was determined to be in on the big surprise.

Polly and Jim didn't let them down either. The moment of dazed surprise when they saw the still-wet walls of the new room jutting out from their house was all that could be asked. Equally satisfying were the expressions on their faces when they opened their door and looked in at the array of gifts.

Some of the new plastic furniture was not in evidence—it was still curing in the electronic furnace. But the crib was finished, and it stood in the center of the room, its gleaming transparent sides proudly displaying the blankets and baby-clothes, diapers, sheets, and towels piled up inside. On the table, jars and dishes stood side by side with new plastic safety pins and an assortment—somewhat premature—of baby toys.

Tony gave them time to take it all in, then insisted that the door be closed and Polly and the baby be allowed to settle down. While he was unwrapping the baby, he heard them in whispered consultation, and a moment later the door opened again. Jim left it very slightly ajar behind him as he stepped out, so they could hear what went on.

"**W**AIT a minute, folks," Tony heard him call. A slight hesitation, and then Jim's voice again. "Polly and I—well, we want

to thank you, and I don't know just how to go about it. I can't really say I'm surprised, because it's exactly the kind of thing a man might know you folks would do. Polly and I, when we came here—well, we'd never had much to do with politics or anything like that. We joined up because we wanted to get away, mostly.

"We—I guess you all know how long we've been waiting for this kid. When he didn't come, back there on Earth, we felt like we had no roots anywheres, and we just—wanted to get away, that's all. When we signed up we figured it sounded good. A bunch of people all out to help each other and work together, and the way the Statute says, extend the frontiers of man by mutual endeavor. It made us feel more like we belonged, more like a family, than just working for some Mars Company would have been.

"It wasn't until after we got here that we began to find out what it was all about, and I guess you know we liked it. Building up this place, everybody working together—it just couldn't ever get done that way back on Earth.

"And then this other thing happened, and the doc said it looked like it was going to work out all right this time.

"We started thinking then, and this is what I've been working up to. Maybe it's silly, but we figure it's something about Mars that made

it work, or something about the Colony. And now the baby's here, I hope none of you will mind, but we'd like to name him Sun Lake City Colony Kandro . . ."

Jim stopped abruptly, and for a too-long moment there was only the grim silence of the crowd, the same bitter thought in every mind.

Then he went on: "Maybe you folks think that's not a very good idea right now. I don't know. If you don't like it, we won't do it. But the way we feel, Polly and me—well, we know things look bad now, but they're going to have an awful hard time, the Planetary Affairs Commission or anybody else, getting us off Mars."

"You're damned well right, Jim!" shouted Nick Cantrella. He faced the crowd with his fists hanging alertly. "Anybody think the kid shouldn't be called Sun Lake City Colony Kandro?"

The harsh silence broke in a roar of confidence that lifted Tony's chin, even though he knew there was no justification for it.

CHAPTER EIGHT

INSIDE, the baby was wailing lustily again. From her position on the couch, Polly raised a commanding arm.

"Turn him over, Jim. He'll probably stop crying if you put him on his tummy."

Tony watched while the new father slid his hand under his son's

back with an exquisite caution that belied his proud air of assurance. Turning to hide his smile, the doctor began piling hospital equipment on the hand-truck, to take back with him when he went.

"Look! Tony, look! Look at Sunny!"

"Sunny, is it?" The doctor turned around slowly. "So he's lost all his dignity already. I was wondering how you were going to get around that tongue-twister of a name . . . Well, what do you know?"

HE WATCHED the baby struggle briefly, then rear back and lift his head upright. He had to admit there was cause for the pride in Polly's voice when a baby not yet two days old could do that.

"Well," the doctor teased, "he's Sun Lake City Colony Kandro, after all. You ask anybody in town if that doesn't make a difference. I won't be surprised if he walks next week, and starts doing long division the first of the month. Who knows, he might learn how to eat pretty soon!"

He realized abruptly he'd made a mistake. Neither parent was ready to joke about that.

"Doc," Jim asked hesitantly, "you're pretty sure there's nothing *wrong*?"

"I told you before," Tony said shortly. "I'm not sure of a blessed thing. If you can see any single reason to believe there's anything wrong with that baby, I wish you'd tell me, because I can't, but—

this is Mars. I can't make promises, and I'll make damned few flat statements. You can go along with me and trust me, or—" There was no alternative, and his brief irritation was already worn out. "You can *not* trust me and go along with me. We have to feel our way, that's all. Now," he said briskly, "you're all checked out on the mask? No trouble with it?"

"No, it's all right. I'm sorry, Doc—"

"Got enough tanks?" Tony interrupted.

"You gave us enough to go from here to Jupiter," Polly put in. "Listen, Tony, please don't think we—"

"What I think," Tony told her, "is that you're good parents, naturally concerned about your child, and that I had no business blowing off. Now let's forget it."

"No," Jim said firmly. "I think you ought to know how we—I mean there's no question in anyone's mind about trusting you. Hell, how do I go about saying this? What I want to tell you is—"

"He wants to say," said Polly from the bed, "that we're both very grateful for what you've done. It's a happiness we thought we'd never know."

"That's it," said Jim.

"He's your baby," said Dr. Tony. "Do a good job with him." He pushed the hand-truck to the door, and waited for Jim to come and help him ease it through. "Oh, by the way," he added, smiling, "I'll



fill out the birth certificate tonight, now that I know the name, if you'll come over and . . ."

"Doc!"

IT WAS Hank Radcliff, running down the street breathless and distraught.

"Doc, come quick—Joan's dying!"

Tony grabbed his black bag and raced down the street with Hank plowing along beside him.

"What happened?"

"When I took her out in the tote truck," Hank panted, "before she could walk to the street, she toppled right over—"

"Walk? You let her walk?"

"But she told me you said it was all right!" The youngster seemed close to tears.

"Joan told you that?" They slowed in front of the Radcliff hut. Tony wiped the anger off his face and went in.

Joan was on the bunk in a parka; the doctor stripped it off and applied his stethoscope. He had adrenalin into her heart in thirty seconds and then sat, grim-faced, at the edge of the bunk, not taking the black disk from her chest.

"Get that coffee," he snapped at Hank without turning. "The stuff they found in the shakedown."

Hank raced out.

After long minutes, Tony exhaled heavily and put away the stethoscope. She'd pulled through once more.

The girl lifted her parchmentlike eyelids and looked at him dully. "I feel better now," she whispered. "I guess I fainted."

"You don't have to talk," Tony sat again on the edge of the bed.

She was silent for a minute, lying back with her eyes closed. He picked up her bird's claw of a hand; the pulse was racing now.

"Doctor Tony?" she asked.

"I'm right here. Don't try to talk. Go to sleep."

"Is Hank here?"

"He'll be back in a minute."

"I want to tell you something, Doctor Tony. It wasn't his fault. I didn't tell him the truth. I told him you said it was all right for me to walk."

"You knew better than that."

"Yes. Yes, I did. I know you'll have to send me back to Earth—"

"Never mind about that, Joan."

"I do, Doctor Tony. Not for me; for Hank. That's why I did it. I'd go back for the Colony because it isn't fair of me to take up all your time, but what about Hank? If I went back, he'd have to go back, too. He couldn't stay here in the Colony if I were on Earth—alive."

"What are you talking about?" demanded the doctor, though he knew with terrible certainty what she meant—what she had tried to do. "Of course he's going back with you. He loves you. Don't you love him?"

She smiled a little and said softly, without urgency, "Yes, I love him."

And then, again hysterically: "But this is what he's wanted all his life. He doesn't feel the way I do about the Colony, the wonderful way we're all working together for everybody. With him it's Mars, ever since he was a little boy. He's in the Colony and he works hard and everybody likes him, but it would be enough for him to be a prospector like old Learoyd. Ever since he was a little boy he used to dream about it. You know how he's always going out into the desert—

"Tell him he doesn't have to go back with me! Tell him I'll be all right. Talk to the shareholders. Make them let him stay. It would break his heart to send him back."

TONY didn't dare excite her by telling her that they might all be sent back, that the Colony was a failure. Even if they pulled through by a miracle, Hank couldn't stay.

They called it the "M or M" rule—"married or marriageable." Far from the lunacies of the jam-packed Earth, they had meant to build with children and allowed no place for new immigrant women past childbearing—or for Hank in love with a woman returned to Earth. It didn't matter now, he thought.

Wearily, he lied, "They wouldn't make him go back if he didn't want to. But he'd want to go himself."

She sighed and closed her eyes. It seemed a long time before he was sure she was asleep.

Hank was waiting in the living room with the coffee.

"She'll be all right for a while," Tony told him. "She's asleep now, I think." He looked at the open doorway and added, "Come outside a minute."

Sitting on the tote truck, he said, "Give her one cup of coffee each day as long as it lasts. After any meal. It'll make her feel better. God, I wish I knew what else we could do. That stuff from Benoway didn't have any effect. I'm sorry I sent you all the way out there."

"That's all right, Doc. There was a chance. And I like seeing the country."

"You certainly do. You should have been one of the pork-and-beaners."

"Hell, Doc, I like it *fine* here in the Colony!"

Liked it, yes. It was on Mars. *Tell him or not?* wondered Tony. *Young man, your wife tried to commit suicide so you would be free to stay on this planet. And what do you think of that?*

The hell with it. What he didn't know wouldn't hurt him, upset him, make him feel guilty—

"Doc, do you think we *will* have to go back?" Hank's voice was more than strained, it was desperate.

Tony stared. "It looks that way right now, Hank. But we have three weeks. Something—anything—may happen. I'm not giving up hope."

But the young man's face was tortured as Tony left him.

JOAN RADCLIFF had wanted death and been cheated of it by adrenalin. Sunny Kandros wanted life, which meant his mother's breast, but some savage irony was cheating him, too. Newly born, five pounds of reflexes depending on the key suckling reflex that somehow was scrambled.

Sunny lay awake without crying, didn't seem to need sleep, could lift his head—all right, put that down to lighter gravity, even though the Bergens' little Loretta hadn't done it. Sunny had a wonderful color, a powerful nursing instinct—but he choked and gagged at the breast. Without fuel the machine of reflexes would run down and stop . . .

It didn't make sense to Tony. He had guiltily half-lied to the Kandros when he told them many babies didn't know how to nurse at first. That was the truth; the lie was that *this baby knew how*, but choked all the same. A feeding problem, they would have blandly called it on Earth, where there still were millions of cows, sterile hospitals, relays of traiped nurses for intravenous nourishment regimes. Here a feeding problem was a feeding problem.

Anyone of the wealthier industrial colonies would automatically have taken Earth-import powdered milk from its stores, but Sun Lake couldn't afford it, didn't have any.

And what was more, Sun Lake wouldn't get powdered milk if Commissioner Bell made good on his threat . . .

If Sunny died, it would be worse than the unnamed little boy the Connollys had lost, and he had left a scar on the doctor's mind that time would never heal. Tony could still see the agonized blue face and the butterfly gasping for air—a premie, but he never should have cleared Mrs. Connolly, seven months gone, until they'd had oxygen cylinders and masks and a tent for emergencies.

The Connollys had shipped back to Earth on the next rocket after the tragedy.

The father had cursed him insanely, damned him for a killer because he hadn't foreseen the need of oxy gear for their baby two months before it was due. OxEn they had, but OxEn made no change in the lungs of a baby. He'd given it intravenously, orally, in every solvent he could lay his hands on during the desperate hours before the improvised mask fed the last trickle of oxygen from their single tank into the lungs of the infant.

Tony forced his face into a smile as he passed a couple—Flexner and his girl Verna. Behind the smile he was thinking that it would be harder to bear a muter reproach from the patient Kandros than Connolly's raging curses.

Tony dragged the loaded hand-

truck into the middle of his living room, and left it there. He could put the stuff away later; it was getting late now, and he had yet to make his afternoon radiation inspection at the Lab. There was a package on the table; he took time to pick it up and read: "For Doctor Tony from Jim and Polly Kandro—with much thanks."

For a moment he held it, weighing it in his hand. No, he decided, he'd open it later, when there was time to relax and appreciate the sentiment that lay behind it. The gift itself would be—would *have* to be—meaningless.

There was no way for any colonist to purchase or procure anything at all from the outside. Except for the very few personal treasures that were somehow squeezed into the rigid weight limit on baggage when they came out, all plastic chairs and sinks, blankets, and windows were uniformly functional and durable. But they were uniform, and they were also scarce. Each household contained the same irreducible minimum; Lab space and work hours were too precious to be used for the production of local consumption items.

TONY closed his door behind him, and set out for the Lab once more. *Dull, monotonous, primitive, uncomfortable*, he tagged inwardly. *Every home, inside and out, just the same!*

Why had they come to Mars? For a better, saner way of life, to retrieve some of the dignity of men, to escape from the complexities and inequities and fear pressures of Earth. And what were they doing? Building a new life, with hard work and suffering, on the precise pattern of the old. There wasn't a person in the Colony who wouldn't do better back on Earth.

He found the Lab in an uproar. All work had stopped, so the grim hunt for the maraine could go on. Nick had already begun an inventory.

"Make this an extra-good check, Doc," Tony was told in the office before he started out. "We'll be handling a lot of stuff that hasn't been used in a long time. And getting into all the corners too."

"Are the checkout tubes racked yet?" Tony asked.

"Right. We issued new ones to the men on the inspection squad."

"I'll do them first," the doctor decided, and went into the cleanup room where the wall racks were already lined with the tubes for that day. Usually they were checked in the following morning's inspection; but today the plant had closed down early for all practical purposes.

The tubes checked clean all down the line.

Tony selected a fresh tube from the opposite wall and went on out through the shipping room to the workrooms. He didn't need armor

for the afternoon inspection. The technicians had been in there working, and if their tubes were all clean there couldn't be any deadly hot stuff. The purpose of the late-day check was to catch reactions that were just starting up, and that might make trouble overnight. In the morning it was different. Anything that had been chaining for twelve or more hours could be vicious.

Back in the office, when he was finished, Tony reported a clean check through. "What," he asked, "are you going to do about the shipment crates?"

"Leave them till last," Mimi Jonathan told him. "If anything turns up in the workrooms or storage bins, we'll have to open up the shipment crates one at a time. Doc, do you think . . . ?"

She stopped, looked down a moment and then back at Tony, with a wry smile. "That's silly, isn't it? I don't know why I expect you to know more about it than I do. Oh, listen—they want you to stick around and monitor if they do have to open the crates. I'll let you know when it gets that far."

"Okay," Tony smiled back at her. "Try to give me more than five minutes notice, will you? I wish we had either a full-time radiological man or another doctor."

"How about Harve?" she suggested. "Could he fill in for you? We didn't want to assign him with-

out your okay—he hasn't done any monitoring on his own yet, has he?"

"No," Tony said thoughtfully. "Not yet. But this won't be anything more than standing by with a counter and keeping his eyes open. I don't see why not; he knows the routine as well as I do by now. I'd leave it up to him," the doctor decided. "If he feels ready to take it on, it'll be a big help to me."

"I'll ask him," Mimi promised.

iii

THIS afternoon the familiar splendors of the Martian scene evoked no glowing certainties in Tony's mind. He walked back from the Lab in the early twilight, his eyes fixed on the far hills, his thought roaming hitherly beyond, to the other side of the range.

Tony had been to the new town, just once, to help out when a too hastily built furnace exploded. The injuries had been more than Pitco's green young doctor could handle all at once. The doctor's inexperience, like the faulty furnace, was typical. The whole place was temporary, until it showed a profit for Pitco. When it did, solid structures would replace the jerry-built shacks; an efficient company administration would put an end to the anarchic social organization.

But for now the town was just a sprawling collection of ram-

shackle buildings, constructed of a dozen different inadequate materials, whatever was available in Marsport when a new house was needed. There was no thought of the future on the other side of the hill, no worry about permanence, no eye to consequence.

If the camp went bust, the population would move on to one of the newer locations—and move again when that collapsed. If, on the other hand, the town survived, the population would move on anyhow. A new crop of workers would be imported from Earth, a tamer, quieter crew, to do routine work in an organized company town, at considerably lower pay. And the boom-town adventurers would go, to find higher wages and a freer life somewhere else.

They struck no roots there, and they wanted none. Of all the widely scattered human settlements on Mars, the Sun Lake Colony alone believed that man could and would some day flourish naturally on the alien soil.

Tony Hellman had a religion: it was the earnest hope that that day would come before he died, that he would live to see them cut the cord with Earth. Training and instinct both cried out against the new danger of abortion to the embryo civilization.

Tony was a good doctor; in Springfield or Jackson City or Hartford—anywhere on Earth—he could have written his own ticket. In-

stead, he had chosen to throw in his lot with a batch of wide-eyed idealists; had, indeed, jumped at the chance.

IT WAS largely Tony's eagerness to emigrate that was responsible for the Colony's "M-or-M" ruling. The Sun Lake Society couldn't afford to turn Dr. Hellman down; they knew just how slim was the possibility of getting another doctor as good. So, after much deliberation, the by-laws were carefully revised, and the words "or marriageable" inserted after the word "married" in the list of qualifications.

The modification had resulted in a flood of new and highly desirable members. Skilled workers were inclined to be more footloose and adventurous before they were married, before they had settled into responsible, well-paid jobs on Earth. Bea Juarez, pilot of the Colony's ship, *Lazy Girl*, was one of the new acquisitions; so was Harvey Stillman, the chief radio-man.

Anna Willendorf was another member who had come in after the revised "M-or-M" ruling, one whose skill was almost as much appreciated as Tony's, for a different reason. Plastics, produced in the Lab, could be, and were, used for almost every item of furniture or furnishings in the Colony, but for some chemical processes, glassware was still a must. And now that giant

machines existed on Earth to turn out almost every conceivable glass utensil, glass-blowers were far between, good ones almost nonexistent. Without Anna's highly specialized talent, the Colony would have had to pay fabulous prices for the transport of bulky packaged glassware from Earth.

Anna was one of the very few unmarried members of the Colony who refused to participate in the communal meals. Laziness, or embarrassment, or both, served to drag in the others, like Tony, who might have preferred to remain aloof. Anna simply ignored the questions and remarks.

ON RARE occasions, however, she relented to the extent of "inviting" the doctor to dine with her—combining their rations, and preparing a meal for him in her own one-room hut. Then, for an hour, she would play hostess to him, an hour that restored, for both of them, the longed-for feeling of gracious, civilized living.

"One for all and all for one." "Mutual endeavor." "Collective self-sufficiency." The whole thing, Tony thought angrily, was an anachronism; more than that, an impossibility. No sane man could believe in it—unless he came from Earth and had nothing to see to believe in.

For tonight, at least, he was free of it. Anna was at the door when he reached it, holding it open for

him. She watched him set down his bag as though he were unloading the troubles of the Universe.

"You need a drink," she decided.

"Who's kidding whom?" He grinned sourly at her. "Some nice, refreshing, vitamin-packed, Grade-A, synthesized orange juice, maybe?"

"I see you haven't been home yet."

She disappeared behind the drape that hid her kitchen section. Not many of them bothered to separate the kitchen from the living room; perhaps, Tony thought, that was what gave her room such a special look. A moment later, she was out again, with two long-stemmed fragile glasses in her hands.

SHE handed one to Tony, and awe and wonder crossed his face as he sipped. He looked his question at her over the rim of the glass.

"I shouldn't have spoiled your surprise, really." She smiled at him. "The Kandros. They wouldn't prepare anything for the baby, but they must have ordered these from Earth when Polly was just—let's see—three months along, to have had them here in time."

"Real wine," Tony marveled, and sipped again. "Aged wine. How did they get it? How could they afford—?"

"They couldn't, of course," she reminded him, "but they have rela-

tives on Earth. You know they're not the only ones who left some cash behind, 'just in case'?"

The doctor looked up sharply, and found a faint smile flickering on her lips. "How did you know?" he demanded. "Where do you find out these things?"

"What do they call it—feminine intuition?" She shrugged and moved toward the kitchen again. "Which also tells me that supper will be a desecrated mess if I don't serve it right now."

She had set the table as usual in front of the big window. Tony took his place and looked out through the eerie twilight across the endless expanse of *Lacus Solis*. The ocean bed was like a vast black velvet now, studded with a million tiny, glinting jewels.

The doctor stared out until Anna returned with a steaming dish. He regarded her soberly and was planning a dutiful compliment when she burst into laughter and set the dish down. "Jim's face," she explained hastily. "It just crossed my mind. He's so proud of the wife and child—"

He was irked by a note of insincerity and supposed for a moment—neurotically, he knew; commonest thing in the world—that she had been laughing at him.

"Nothing so funny," he said stiffly.

"I'm sorry. Serve the greens?"

Dinner performed its usual magic. Tony *had* been really hun-

gry. Tilting his chair against the wall, with his empty pipe in his mouth, he found that things were getting back into proportion.

"Anyhow," he said, "we still have time." They had been talking about Bell's threat of quarantine. Through the daylight hours it had seemed at least the end of the world. Now, with a pleasantly noticeable buzz from the wine in his head and a palatable meal digesting, above all, with some privacy and clear space and time around him, Tony couldn't recapture the sharp alarm of the threat.

ANNA, very seriously, demanded, "Do you think Bell can run us out?"

He waved a little too expansively. "Prob'ly not. Any number of other possibilities. Somebody at Pitco might have taken the stuff; they're close enough. Nope—" He hauled up. "Ed Nealey wouldn't make a mistake like that. He was working the Bloodhound and there's a boy who'll do any job the right way. Don't worry about it, though. It's two weeks to rocket landing, another week to Shipment Day—something'll turn up. We'll send O'Donnell to Marsport. If there's a legal angle he'll find it. Maybe he can scare Bell into backing down. Bell's supposed to be a small-timer. He wouldn't want any real trouble."

Anna got up abruptly and filled his empty glass.

"Hey, you take some too!" Tony insisted.

She made a show of draining the last few drops into her own glass; the rims touched and they drank.

"You're a strange girl, Anna," said Tony. "Hell, I didn't mean exactly that—I mean you're not like the other women here. Joan, Bea, Polly, Verna."

"No," she said. "Not very much like Bea."

Tony didn't know whether she was angry or amused and decided he didn't care. "I don't know why I don't marry you."

"Two reasons," Anna smiled. "One, you're not sure you want to. Two, you're not at all sure I do."

The sudden banging on the door was like an explosion in the quiet room. Harve Stillman didn't wait for anyone to answer; he burst in.

He was white-faced and shaken. "Doc!"

Tony jumped up and reached for his bag. "What is it? Joan? The baby? An accident at the Lab?"

"Flash from Marsport. The rocket's coming in." The radio man stopped to catch his breath. "They're inside radio range now. Estimated time of arrival, 4:00 A.M."

"Tomorrow?" Anna gasped.

Harve nodded and Tony put down his bag with mechanical precision in the center of the table.

Tomorrow! Three weeks had been little enough time to find the mercaine and the thief and get rid of Bell's strangling cordon. Now, with the rocket in ahead of schedule, two of those weeks were yanked out from under them!

—CYRIL JUDD

CONTINUED NEXT MONTH

HAVE YOU MISSED SOMETHING?

► A rather astonishing number of readers have been good enough to inform us that they regard their collection of *GALAXY Science Fiction* in the nature of a financial and literary investment that, they feel sure, is bound to increase in value with the years.

► If your collection of this magazine is not complete, we have a fair supply of back numbers which we are offering at the regular price—no postage or handling charge, and no stamps, either, please.

► You'll find our address at the front of the book.

► And if your memory is anything like ours, you should do it today! Otherwise, you'll continue to have missed something by missing the previous issues of *GALAXY Science Fiction*.



Africa's Mysterious Mammal

By WILLY LEY

IT IS, of course, just the accident of Dutch spelling which puts the aardvark in the number one place in any Natural History index. But if strangeness were the deciding factor—strangeness of appearance, of habits or of position in the zoological system—the

aardvark would also land in the first place.

There are three living varieties of aardvarks and their scientific designation is *Oryzteropus*. The term is derived from a word in classical Greek which has the meaning of "digging tool," so that the name

There ought to be a law against such creatures as these; they violate practically all the principles of zoology!

may be simply translated as "the digger."

The smallest of the three living varieties is *Orycteropus aethiopicus*, living, as indicated by the generic name, in North East Africa. The Cape aardvark, *Orycteropus afer* or *Orycteropus capensis*, is considerably larger, five to six feet long, and was the first to become known. Most recent addition is *Orycteropus erikssoni*, or Eriksson's aardvark, which is the largest of the three and lives in the dense forest of the Wele, Mubangi and Ituri regions of Central Africa.

Considering the location and nature of the last one's habitat, it is not surprising that it was discovered as recently as 1905. The other two just crept up on science, the year of discovery not being known.

This is strange in the case of the Ethiopian variety. Except for Egypt and the Mediterranean shore of the African continent, no other part of Africa was known for as long a time as Ethiopia. But even around the middle of the last century the Ethiopians themselves were mostly doubtful about the aardvark. An Austrian traveler, Theodor von Heuglin, was told by natives that in their country there was a flesh-eating beast, with the head of a crocodile, the ears of a donkey and the tail of a monkey.

Since von Heuglin guessed at once that it might be *Orycteropus* (he was not acquainted with the now common Dutch name) it is

clear that its existence was known to him. His guess was based essentially on the donkey ears and he correctly put down the item of the crocodile's head to a desire to conform with the alleged flesh-eating habits. He also noted, which is interesting, that the natives who just told the story about it referred to it as *Tirghileb*. The others who actually knew the animal had another name for it; they called it *Akw Delaf*, "Father of Nails," which makes sense to anybody who has ever seen the aardvark's digging claws.

THE actual year of discovery of the Cape aardvark is not known either, but there is an early report about it which seems to be completely unknown to most zoologists. It can be found in a folio volume which was published in Germany in 1719. Its title reads, translated, *Description of the Cape of Good Hope*, and its author was a pastor, Peter Kolb. After his return to his native country he acquired the title of *Magister* and also became *Rector* of a school in a small town.

Magister Peter Kolb must have had voluminous notes and the book he wrote must have been rather tedious even for the literary tastes of his contemporaries. An anonymous Frenchman published a set of three volumes of excerpts, translated into French—and badly, if one is to trust the verdict of the

original publisher Peter Conrad Monath, who then proceeded to bring out a still heavy volume of excerpts in German, published in 1743.

Because Magister Kolb's report has never been republished or even quoted since its original appearance, it pays to do so now. It may be remarked first that the book is chiefly concerned with the natives of the area that is now the Union of South Africa. The zoological aspect creeps in via their domesticated animals, which leads to a chapter on "the ferocious and cruel animals" of the area. Finally Part III, Chapter 5 is devoted to such animals as are neither domesticated nor "cruel." It has several subdivisions, one of which is called "On the Pigs" and it says that there are four kinds of pigs in the area. Two of them have been introduced by Man, one from Java and one from Europe. The third kind is the "Spiny Pig" (the porcupine) and then:

The fourth kind is called the Earth Pig. It somewhat resembles the red pigs one meets in some places in Europe. But it has a longer skull and sharper snout, but no teeth [Kolb means tusks] and few bristles. The tail is long, the legs are long and strong. It lives in the ground where it makes a burrow with great speed. As soon as it has its head and fore limbs in the hole, it can hold on so fast

that even the strongest man cannot pull it out. Should it be hungry, it will look for an ant-hill. [Kolb means termite hill.] When it has found one, it looks around whether there is any danger . . . then it lies down and extends its tongue as far as it can. The ants crawl upon the tongue. When there are enough, the animal pulls the tongue in and swallows them. This it continues to do until it is fully sated . . . Its flesh has a delicious taste, almost like that of our wild hogs, and is very healthy. The Europeans and the Hottentots often hunt these animals. They are easy to kill by means of hitting them over the head with a stick.

THE term "earth pig" used by Kolb is, of course, a straight translation of the Dutch word *aardvark*, and the Dutch used that name because the hindlegs of the animal can be and are smoked like hams. (Mrs. Ley insists that that must be "the ham what ain't.")

Strangely enough Magister Kolb's simple account was not believed. When the French naturalist Count Buffon assembled the material for his great natural history work, he knew of Kolb's story, presumably via the French translation of excerpts, but decided that the animal was mythical.

This decision could hardly have been prompted by Kolb's account,

but Buffon may have heard from other sources that the animal was up to six feet long and lived in burrows in spite of its size. He may have been told that it has donkey's ears, independently movable, that it has long black hair, but so sparse that the skin can be seen through it. That it has a tail as heavy as a crocodile's tail, that it could dig so fast that even a strong man armed with a spade could not keep up with it, not counting the minor annoyance that the digging animal, keeping ahead of him, throws the soil it excavates frantically into the pursuer's face. Count Buffon may have been told that armadillos, after feeding, "dance" in the moonlight. And that, when pursued above ground, they run half-erect on their hind legs for a short distance.

Except for this bipedal running, which is still somewhat in doubt, all these things were and are perfectly true, but Buffon may have found the composite picture entirely too much.

The volume in question had just been printed and bound when another German, a traveling surgeon by the name of Peter Simon Pallas, came to the armadillo's defense. Peter Simon Pallas had been elected to the Royal Society when only 23 years old, which commanded respect. The book in which he described the armadillo was written in Latin and was published in The Hague in 1766. Buffon, in later editions of his own work, accepted the

armadillo on Pallas' authority—which must understandably have been a psychological strain—which had the result that later writers thought Pallas had furnished the first mention, or the first description, or even that he had discovered it personally.

Although all armadillos are nocturnal, a specimen may be encountered in daylight on occasion. The English traveler Henry Drummond has left the following account of such a chance meeting:

... My dog did not pay any attention to my calls and I saw an animal which I could not recognize at once jump up in the high grass and run away. My dog chased it for several hundred paces and then stopped in front of one of the numerous holes . . . The tracks then told me that it had been an armadillo. I first tried to smoke it out of its apparently shallow burrow, but this attempt failed. Then I sent the Kaffir who was with me back for spades and while waiting I heard the armadillo dig continuously for two hours. When the men finally returned with tools I ordered them to dig, but after half an hour it became clear that we could not catch it that way. I changed my method, listened where the animal was and had a vertical hole dug about three feet in front of its position. After another hour we had come

so close that the aardvark stopped digging, retreated and came out of the burrow. I then killed it with a shot.

THE adult aardvark does not seem to have any other enemies than the natives, but the young are easy prey for pythons, which have the proper shape for entering the burrows. While aardvarks are not too difficult to keep in a zoological garden, they don't make much of an exhibit because they tend to sleep all day long—and, more exasperating, even, dig a hole for this purpose.

In nature the aardvark does not seem to exert much effort to find its own burrow when the sun rises; it is too easy to dig another one. Some observers have expressed the belief that each aardvark has a number of burrows, anyway. Others have thought that all the burrows may be common property.

Of the Cape aardvark it is believed that it gives birth to only one young. We are sure, however, about that fact as regards the Ethiopian variety because of Theodor von Heuglin's observations. He reported that the single young is born in May or June, that it is suckled for a long time and that it is most hairy, having *almost* a fur, when one year old. After that the hair is lost rapidly, so that the pinkish skin can be seen.

When von Heuglin was in Abyssinia, he kept one in captivity

for a long time, feeding it with milk, honey, dates and other fruit, in addition to the insects which it found itself. He wrote that it soon followed him around and amused all onlookers by its grotesque jumps. But, as usual, it slept most of the day. It always buried its droppings and von Heuglin noticed that the shallow hole dug for this purpose was dug with the hind feet and then covered up with the front feet. When it came to digging for a shelter, the fore feet did most of the work.

While this variety lives in the mountainous and dry country of Abyssinia, and the Cape variety in the open veldt of the South, Eriksson's aardvark has made the tropical humid heat of the Rain Forest its home. It is almost devoid of hairs and its skin is not pink like that of the others, but brick red, closely matching the red soil of Africa. It has shorter, more piglike ears, and, while more massive in general build, it has a much thinner tail than the two others. One, shot in the Ituri Forest by the British naturalist Cuthbert Christy in 1912, measured eight feet in length and Christy found tracks of an even larger specimen.

ALL this added up to a tight little group of very strange animals, but the real mystery was—which animal outside that group, living or extinct, had to be regarded as the nearest relative? Ob-

viously the aardvarks had to have relatives. But what were they? Fossils did not help much. The best known fossil type, excavated from the soil of the island of Samos, from the mainland of Greece and even from Persian soil, is called *Orycteropus gaudryi*. When, in 1888, it was described for the first time, the description stated that "except for its much smaller size, it differs little from the living Cape variety." Later work has shown that there are numerous minor differences, but it is still true that the Samos aardvark, if it were found alive, would simply be a fourth aardvark.

In 1918 W. D. Matthew made the original statement that the aardvarks may be very primitive ungulates, i.e. hoofed mammals. This idea is now generally accepted, and received much support some twenty years after it was first uttered because the San Juan Basin of New Mexico yielded the remains of a large mammal which was called *Ectoconus*. It was a very early mammal, belonging to the ancestral group of the hoofed mammals of our time. Although it had a lighter tail, and although its legs and feet were not adapted to

digging, it bore a strong resemblance in general appearance and in bodily proportions to the living aardvarks. In size it ranked with the Buri forest giants.

PROF. MATTHEW did not claim that his *Ectoconus* was the ancestor of the African digger: "This general resemblance does not involve any near relationship, but indicates merely that the modern *Orycteropus* has retained with little alteration much of the proportions and structure that were common among primitive placentals of similar size."

And thus the animal doubted by Buffon and later shunted from place to place in zoology books turned out to be a somewhat modified image of a group of very early mammals, completely extinct otherwise. Their hoofed offspring has roamed all over Earth since then, excepting only Antarctica and the Australian region. But the leftover of the original type had to go underground to persist.

If I had merely read accounts of the animal without having seen specimens, I think I would not believe in aardvarks.

—WILLY LEY

• • • Coming Next Month • • •

MARS CHILD by Cyril Judd—Installment 2
DON'T LIVE IN THE PAST by Damon Knight
ANGEL'S EGG by Edgar Pangborn

‡ Plus SHORT STORIES . . . FEATURES . . . mayhap an ARTICLE if space permits. ‡ Looks like a particularly splendid issue; make sure you get your copy!

5 GALAXY'S STAR

SHELF

THE FOUR-SIDED TRIANGLE,
by William F. Temple. Frederick
Fell, Inc., New York, 1951. 240
pages, \$2.75.

I FIND it difficult not to go off the deep end about this novel. It is one of the best written (when the British write well they write magnificently) and warmest, most brilliantly characterized and humanly real science fiction tales I have read since S. Fowler Wright's completely dissimilar *Deluge*. With this book, Temple becomes a British novelist in the grand tradition. Make no mistake, you will never forget the book or its people.

Since the jacket blurb gives away the novel's plot in the first para-

graph, there is no reason why the reviewer shouldn't, also. Very simply, it is based on the idea that two men in love with the same girl invent a matter-duplicating machine and make a duplicate of the girl, as well as of other things.

Temple tells the story through the eyes of a wonderful elderly physician who is general practitioner for the whole community where the action takes place. In addition to the doctor, the book gives us a group of people so poignantly real that they actually seem to come alive on the page. There is the brilliant, lovable, erratic boy who is a born scientist—and a born fool; there is the son of an old country family who exemplifies everything that is

good and bad about the traditional British gentleman; and there is a girl—well, wait till you read the book. She is surely one of the most original and most desirable creations in any recent novel, science fiction or otherwise.

H. L. Gold has defined adult science fiction as: fiction that is based on credible characters with believable motivations, whose conflicts and problems are the result of a *projected environment*, with which their attempts to find a solution, and the solution itself, are logically consistent. *The Four-Sided Triangle* fits that definition as perfectly as any science fiction I have ever read.

DRAGONS IN AMBER, by Willy Ley. *The Viking Press, New York*, 1951. 320 pages, \$3.75.

TO THOSE who are familiar with *The Longfish*, *the Dodo* and *the Unicorn*, this new collection of "Adventures of a romantic naturalist" (as the book's subtitle describes it) will come as a welcome and long-awaited second helping of something already tasted and found good. For strangers to Willy Ley as a wanderer down the byways of paleontology, piscatology, vulcanology, and a lot of other naturalologies, who know him only as one of the nation's outstanding rocket experts, the book will come as an unexpected treat, a rich and flavorful one.

In that completely charming,

slightly Europeanized English which makes Willy Ley such a fine and individual stylist, we are told of the incredible life cycle of eels; the curious history and prehistory of amber; the paleontological parade of the camel and his kin (did you know that the camel is supposed to have originated in the Americas, and emigrated to Asia?); the hair-raising story of Krakatoa, the volcano that blew itself to bits, and how the remains were soon repopulated with all kinds of flora and fauna; and many more marvels—mammoths, pandas, ichthyosaurs, milus, takahas, ginkos, and so on.

The book is a must for anyone who is curious about the *natural* world we live in and the strange things it contains.

THE STARS LIKE DUST, by Isaac Asimov. *Doubleday & Co., New York*, 1951. 218 pages, \$2.50.

THIS workmanlike, complex weaving of a possible pattern of tomorrow first appeared as *Tyrann*, GALAXY's second book-length serial. Its publication between hard covers is fit reward for what is a first-rate piece of imaginative story-telling.

There is nothing in any particular unprecedented about Asimov's newest. It falls into the Grand Tradition of galactic empire romances which was founded in the first place by the grandiose E. E.

Smith, Ph.D.—a tradition which is already one of the richest in science fiction, being most magnificently exemplified by Asimov's own earlier "Foundation" series.

The present tale imagines a far-distant future in which a brilliantly ruthless people, the Tyranni, are in the process of taking over the Galaxy with their advanced astro-aval sciences. That Tyranni will eventually be defeated goes without question. However, the intricate travails and treasons, conspiracies and confrontations, assassinations and assignments which lead up to the victory-before-the-final-victory (the latter being left to the reader's imagination) make for reading of the can't-put-it-down school.

THE MAN WHO SOLD THE MOON, by Robert A. Heinlein.
Santa Publishers, Chicago, 1950,
288 pages, \$3.00.

HEINLEIN fans (and who isn't?) will not want to miss this one as your reviewer did in the flurry of setting up the first schedule of reviews for GALAXY last summer. It is the first volume in the "Future History" on which the author has been working, on and off, since 1939. It contains some of the most memorable of Robert Heinlein's-Anson MacDonald's shorter stories and novellas.

To people who know Heinlein only through his slick magazine

stories, those in this collection will come as a revelation; to fans who are already happily familiar with some or all of these *Astonishing Science Fiction* tales, the book will be a handsomely bound method of storing them permanently against the many coming days of re-reading.

WHEN WORLDS COLLIDE, by Philip Wylie and Edwin Balmer.
J. B. Lippincott Co., Philadelphia, 1931, 690 pages, \$3.95.

FIRST published in 1931 and 1932, the two volumes which, combined, comprise this fat, low-priced reprint reveal a richly melodramatic story, an outstanding example of early science fiction for the slick magazine audience.

The tales tell of the complete destruction of Earth by one of two wandering planets from outer space, and the establishment on the other wanderer of a small nexus of human civilization to "carry on" as the new planet takes up its orbit around our sun. Though marred somewhat by the inclusion of our present international tensions, it still tells a thrilling story and tells it well.

All in all, an excellent month for science fiction books—your reviewer's gall-point pen, which writes with acid under literary strain, has been gladly laid aside.

—GROFF CONKLIN



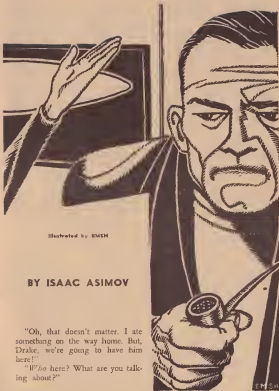
HOSTESS

Inviting the extraterrestrial was politeness only, but she should have asked her husband.

ROSE SMOLLETT was happy about it; almost triumphant. She peeled off her gloves, put her hat away, and turned her brightening eyes upon her husband.

She said, "Drake, we're going to have him here."

Drake looked at her with annoyance. "You've missed supper. I thought you were going to be back by seven."



Illustrated by EMEM

BY ISAAC ASIMOV

"Oh, that doesn't matter. I ate something on the way home. But, Drake, we're going to have him here!"

"If he here? What are you talking about?"

HOSTESS

87

"The doctor from Hawkin's Planet! Didn't you realize that was what today's conference was about? We spent all day talking about it. It's the most exciting thing that could possibly have happened!"

Drake Smollett removed the pipe from the vicinity of his face. He stared first at it and then at his wife. "Let me get this straight. When you say the doctor from Hawkin's Planet, do you mean the Hawkinsite you've got at the Institute?"

"Well, of course. Who else could I possibly mean?"

"And may I ask what the devil you mean by saying we'll have him here?"

"Drake, don't you understand?"

"What is there to understand? Your Institute may be interested in the thing, but I'm not. What have we to do with it personally? It's Institute business, isn't it?"

"But, darling," Rose said, patiently, "the Hawkinsite would like to stay at a private house somewhere, where he won't be bothered with official ceremony, and where he'll be able to proceed more according to his own likes and dislikes. I find it quite understandable."

"Why at *our* house?"

"Because our place is convenient for the purpose, I suppose. They asked if I would allow it, and frankly," she added with some stiffness, "I consider it a privilege."

"Look!" Drake put his fingers

through his brown hair and succeeded in rumpling it. "We've got a convenient little place here—granted! It's not the most elegant place in the world, but it does well enough for us. However, I don't see where we've got room for extra-terrestrial visitors."

ROSE began to look worried. She removed her glasses and put them away in their case. "He can stay in the spare room. He'll take care of it himself. I've spoken to him and he's very pleasant. Honestly, all we have to do is show a certain amount of adaptability."

Drake said, "Sure, just a little adaptability! The Hawkinsites breathe cyanide. We'll just adapt ourselves to that, I suppose!"

"He carries the cyanide in a little cylinder. You won't even notice it."

"And what else about them that I won't notice?"

"*Nothing* else. They're perfectly harmless. Goodness, they're even vegetarians."

"And what does that mean? Do we feed him a bale of hay for dinner?"

Rose's lower lip trembled. "Drake, you're being deliberately hateful. There are many vegetarians on Earth; they don't eat hay."

"And what about us? Do we eat meat ourselves or will that make us look like cannibals to him? I won't live on salads to suit him; I warn you."

"You're being quite ridiculous."

Rose felt helpless. She had married late in life, comparatively. Her career had been chosen; she herself had seemed well settled in it. She was a fellow in biology at the Jenkins Institute for the Natural Sciences, with over twenty publications to her credit. In a word, the line was hewed, the path cleared; she had been set for a career and spinsterhood. And now, at 35, she was still a little amazed to find herself a bride of less than a year.

Occasionally, it embarrassed her, too, since she sometimes found that she had not the slightest idea of how to handle her husband. What *did* one do when the man of the family became mulish? That was not included in any of her courses. As a woman of independent mind and career, she couldn't bring herself to cajolery.

So she looked at him steadily and said simply, "It means very much to me."

"Why?"

"Because, Drake, if he stays here for any length of time, I can study him really closely. Very little work has been done on the biology and psychology of the individual Hawkinsite or of any of the extraterrestrial intelligences. We have some on their sociology and history, of course, but that's all. Surely, you must see the opportunity. He stays here; we watch him, speak to him, observe his habits—"

"Not interested."

"Oh, Drake, I don't understand you."

"You're going to say I'm not usually like this, I suppose."

"Well, you're not."

DRAKE was silent for a while. He seemed withdrawn and his high cheekbones and large chin were twisted and frozen into a brooding position.

He said, finally, "Look, I've heard a bit about the Hawkinsites in the way of my own business. You say there have been investigations of their sociology, but not of their biology. Sure, it's because the Hawkinsites don't like to be studied as specimens any more than we would. I've spoken to men who were in charge of security groups watching various Hawkinsite missions on Earth. The missions stay in the rooms assigned to them and don't leave for anything but the most important official business. They have nothing to do with Earthmen. It's quite obvious that they are as revolted by us as I personally am by them.

"In fact, I just don't understand why this Hawkinsite at the Institute should be any different. It seems to me to be against all the rules to have him come here by himself, anyway—and to have him want to stay in an Earthman's home just puts the maraschino cherry on top."

Rose said, wearily, "This is different. I'm surprised you can't

understand it, Drake. He's a doctor. He's coming here in the way of medical research, and I'll grant you that he probably doesn't enjoy staying with human beings and will find us perfectly horrible. But he must stay just the same! Do you suppose human doctors enjoy going into the tropics, or that they are particularly fond of letting themselves be bitten by infected mosquitoes?"

"Drake said sharply, "What's this about mosquitoes? What have they to do with it?"

"Why, nothing," Rose answered, surprised. "It just came to my mind, that's all. I was thinking of Reed and his yellow fever experiments."

Drake shrugged. "Well, have it your own way."

For a moment, Rose hesitated. "You're not angry about this, are you?" To her own ears she sounded unpleasantly girlish.

"No."

And that, Rose knew, meant that he was.

ROSE surveyed herself doubtfully in the full-length mirror. She had never been beautiful and was quite reconciled to the fact; so much so that it no longer mattered. Certainly, it would not matter to a being from Hawkin's Planet. What *did* bother her was this matter of being a hostess under the very queer circumstances of having to be tactful to an extra-

terrestrial creature and, at the same time, to her husband as well. She wondered which would prove the more difficult.

Drake was coming home late that day; he was not due for half an hour. Rose found herself inclined to believe that he had arranged that purposely in a sullen desire to leave her alone with her problem. She found herself in a state of mild resentment.

He had called her just before noon at the Institute and had asked abruptly, "When are you taking him home?"

She answered, curtly, "In about three hours."

"All right. What's his name? His Hawkinsite name?"

"Why do you want to know?" She could not keep the chill from her words.

"Let's call it a small investigation of my own. After all, the thing will be in my house."

"Oh, for heaven's sake, Drake, don't bring your job home with you!"

Drake's voice sounded tinny and nasty in her ears. "Why not, Rose? Isn't that exactly what you're doing?"

It was, of course, so she gave him the information he wanted.

This was the first time in their married life that they had had even the semblance of a quarrel, and, as she sat there before the full-length mirror, she began to wonder if perhaps she ought not make an at-

tempt to see his side of it. In essence, she had married a policeman. Of course he was more than simply a policeman; he was a member of the World Security Board.

It had been a surprise to her friends. The fact of the marriage itself had been the biggest surprise, but if she had decided on marriage, the attitude was, why not with another biologist? Or, if she had wanted to go afield, an anthropologist, perhaps; even a chemist; but why, of all people, a policeman? Nobody had exactly said those things, naturally, but it had been in the very atmosphere at the time of her marriage.

She had resented it then, and ever since. A man could marry whom he chose, but if a doctor of philosophy, female variety, chose to marry a man who never went past the bachelor's degree, there was shock. Why should there be? What business was it of theirs? He was handsome, in a way, intelligent, in another way, and she was perfectly satisfied with her choice.

Yet how much of this same snobbishness did she bring home with her? Didn't she always have the attitude that her own work, her biological investigations, were important, while his job was merely something to be kept within the four walls of his little office in the old U. N. buildings on the East River?

She jumped up from her seat in agitation and, with a deep breath,

decided to leave such thoughts behind her. She desperately did not want to quarrel with him. And she just wasn't going to interfere with him. She was committed to accepting the Hawkinsite as guest, but otherwise she would let Drake have his own way. He was making enough of a concession as it was.

HARG THOLAN was standing quietly in the middle of the living room when she came down the stairs. He was not sitting, since he was not anatomically constructed to sit. He stood on two sets of limbs placed close together, while a third pair entirely different in construction were suspended from a region that would have been the upper chest in a human being. The skin of his body was hard, glistening and ridged, while his face bore a distant resemblance to something alienly bovine. Yet he was not completely repulsive, and he wore clothes of a sort over the lower portion of his body in order to avoid offending the sensibilities of his human hosts.

He said, "Mrs. Smollett, I appreciate your hospitality beyond my ability to express it in your language," and he drooped so that his forelimbs touched the ground for a moment.

Rose knew this to be a gesture signifying gratitude among the beings of Hawkin's Planet. She was grateful that he spoke English as well as he did. The construction of

his mouth, combined with an absence of incisors, gave a whistling sound to the sibilants. Aside from that, he might have been born on Earth for all the accent his speech showed.

She said, "My husband will be home soon, and then we will eat."

"Your husband?" For a moment, he said nothing more, and then added, "Yes, of course."

She let it go. If there was one source of infinite confusion among the five intelligent races of the known Galaxy, it lay in the differences among them with regard to their sex life and the social institutions that grew around it. The concept of husband and wife, for instance, existed only on Earth. The other races could achieve a sort of intellectual understanding of what it meant, but never an emotional one.

She said, "I have consulted the Institute in preparing your menu. I trust you will find nothing in it that will upset you."

The Hawkinsite blinked its eyes rapidly. Rose recalled this to be a gesture of amusement.

He said, "Proteins are proteins, my dear Mrs. Smollett. For those trace factors which I need but are not supplied in your food, I have brought concentrates that will be most adequate."

And proteins *were* proteins. Rose knew this to be true. Her concern for the creature's diet had been largely one of formal politeness.

In the discovery of life on the planets of the outer stars, one of the most interesting generalizations that had developed was the fact that, although life could be formed on the basis of substances other than proteins—even on elements other than carbon—it remained true that the only known intelligences were proteinaceous in nature. This meant that each of the five forms of intelligent life could maintain themselves over prolonged periods on the food of any of the other four.

SHE heard Drake's key in the door and went stiff with apprehension.

She had to admit he did well. He strode in, and, without hesitation, thrust his hand out at the Hawkinsite, saying firmly, "Good evening, Dr. Tholan."

The Hawkinsite put out his large and rather clumsy forelimb and the two, so to speak, shook hands. Rose had already gone through that procedure and knew the queer feeling of a Hawkinsite hand in her own. It had felt rough and hot and dry. She imagined that, to the Hawkinsite, her own and Drake's felt cold and slimy.

At the time of the formal greeting, she had taken the opportunity to observe the alien hand. It was an excellent case of converging evolution. Its morphological development was entirely different from that of the human hand, yet it had

brought itself into a fairly approximate similarity. There were four fingers but no thumb. Each finger had five independent ball-and-socket joints. In this way, the flexibility lost with the absence of the thumb was made up for by the almost tentacular properties of the fingers. What was even more interesting to her biologist's eyes was the fact that each Hawkinsite finger ended in a vestigial hoof, very small and, to the layman, unidentifiable as such, but clearly adapted at one time to running, just as man's had been to climbing.

Drake said, in friendly enough fashion, "Are you quite comfortable, sir?"

The Hawkinsite answered, "Quite. Your wife has been most thoughtful in all her arrangements."

"Would you care for a drink?"

The Hawkinsite did not answer but looked at Rose with a slight facial contortion that indicated some emotion which, unfortunately, Rose could not interpret. She said, nervously, "On Earth there is the custom of drinking liquids which have been fortified with ethyl alcohol. We find it stimulating."

"Oh, yes. I am afraid, then, that I must decline. Ethyl alcohol would interfere most unpleasantly with my metabolism."

"Why, so it does to Earthmen, too, but I understand, Dr. Tholan," Drake replied, "Would you object to my drinking?"

"Of course not."

Drake passed close to Rose on his way to the sideboard and she caught only one word. He said, "God!" in a tightly controlled whisper, yet he managed to put seventeen exclamation points after it.

THE Hawkinsite stood at the table. His fingers were models of dexterity as they wove their way around the cutlery. Rose tried not to look at him as he ate. His wide lipless mouth split his face alarmingly as he ingested food, and, in chewing, his large jaws moved disconcertingly from side to side. It was another evidence of his ungulate ancestry. Rose found herself wondering if, in the quiet of his own room, he would later chew his cud, and was then panic-stricken lest Drake get the same idea and leave the table in disgust. But Drake was taking everything quite calmly.

He said, "I imagine, Dr. Tholan, that the cylinder at your side holds cyanide?"

Rose started. She had actually not noticed it. It was a curved metal object, something like a water canteen, that fitted flatly against the creature's skin, half-bidden behind its clothing. But, then, Drake had a policeman's eyes.

The Hawkinsite was not in the least disconcerted. "Quite so," he said, and his hoofed fingers held out a thin, flexible hose that ran

up his body, its tint blending into that of his yellowish skin, and entered the corner of his wide mouth. Rose felt slightly embarrassed, as though at the display of intimate articles of clothing.

Drake said, "And does it contain pure cyanide?"

The Hawkinsite humorously blinked his eyes. "I hope you are not considering possible danger to Earthites. I know the gas is highly poisonous to you and I do not need a great deal. The gas contained in the cylinder is five per cent hydrogen cyanide, the remainder oxygen. None of it emerges except when I actually suck at the tube, and that need not be done frequently."

"I see. And you really must have the gas to live?"

Rose was slightly appalled. One simply did not ask such questions without careful preparation. It was impossible to foresee where the sensitive points of an alien psychology might be. And Drake *must* be doing this deliberately, since he could not help realizing that he could get answers to such questions as easily from herself. Or was it that he preferred not to ask her?

The Hawkinsite remained apparently unperturbed. "Are you not a biologist, Mr. Smollett?"

"No, Dr. Tholan."

"But you are in close association with Mrs. Dr. Smollett."

Drake smiled a bit. "Yes, I am married to a Mrs. doctor, but just the same I am not a biologist; mere-

ly a minor government official. My wife's friends," he added, "call me a policeman."

ROSE hit the inside of her cheek. In this case it was the Hawkinsite who had impinged upon the sensitive point of an alien psychology. On Hawkins' Planet, there was a tight caste system and intercaste associations were limited. But Drake wouldn't realize that.

The Hawkinsite turned to her. "May I have your permission, Mrs. Smollett, to explain a little of our biochemistry to your husband? It will be dull for you, since I am sure you must understand it quite well already."

She said, "By all means do, Dr. Tholan."

He said, "You see, Mr. Smollett, the respiratory system in your body and in the bodies of all air-breathing creatures on Earth is controlled by certain metal-containing enzymes, I am taught. The metal is usually iron, though sometimes it is copper. In either case, small traces of cyanide would combine with these metals and immobilize the respiratory system of the terrestrial living cell. They would be prevented from using oxygen and killed in a few minutes.

"The life on my own planet is not quite so constituted. The key respiratory compounds contain neither iron nor copper; no metal at all, in fact. It is for this reason that my blood is colorless. Our

compounds contain certain organic groupings which are essential to life, and these groupings can only be maintained intact in the presence of a small concentration of cyanide. Undoubtedly, this type of protein has developed through millions of years of evolution on a world which has a few tenths of a per cent of hydrogen cyanide occurring naturally in the atmosphere. Its presence is maintained by a biological cycle. Various of our native micro-organisms liberate the free gas."

"You make it extremely clear, Dr. Tholan, and very interesting," Drake said. "What happens if you don't breathe it? Do you just go, like that?" He snapped his fingers.

"Not quite. It isn't equivalent to the presence of cyanide for you. In my case, the absence of cyanide would be equivalent to slow strangulation. It happens sometimes, in ill-ventilated rooms on my world, that the cyanide is gradually consumed and falls below the minimum necessary concentration. The results are very painful and difficult to treat."

Rose had to give Drake credit; he really sounded interested. And the alien, thank heaven, did not mind the catechism.

The rest of the dinner passed without incident. It was almost pleasant.

Throughout the evening, Drake remained that way; interested. Even more than that—absorbed. He drowned her out, and she was glad

of it. He was the one who was really colorful and it was only her job, her specialized training, that stole the color from him. She looked at him gloomily and thought, *Why did he marry me?*

Drake sat, one leg crossed over the other, hands clasped and tapping his chin gently, watching the Hawkinsite intently. The Hawkinsite faced him, standing in his quadruped fashion.

Drake said, "I find it difficult to keep thinking of you as a doctor."

The Hawkinsite laughingly blinked his eyes. "I understand what you mean," he said. "I find it difficult to think of you as a policeman. On my world, policemen are very specialized and distinctive people."

"Are they?" said Drake, somewhat drily, and then changed the subject. "I gather that you are not here on a pleasure trip."

"No, I am here very much on business. I intend to study this queer planet you call Earth, as it has never been studied before by any of my people."

"Queer?" asked Drake. "In what way?"

The Hawkinsite looked at Rose. "Does he know of the Inhibition Death?"

Rose felt embarrassed. "His work is important," she said. "I am afraid that my husband has little time to listen to the details of my work." She knew that this was not

really adequate and she felt herself to be the recipient, yet again, of one of the Hawkinsite's untranslatable emotions.

The extraterrestrial creature turned back to Drake. "It is always amazing to me to find how little you Earthmen understand your own unusual characteristics. Look, there are five intelligent races in the Galaxy. These have all developed independently, yet have managed to converge in remarkable fashion. It is as though, in the long run, intelligence requires a certain physical makeup to flourish. I leave that question for philosophers. But I need not belabor the point, since it must be a familiar one to you.

"Now when the differences among the intelligences are closely investigated, it is found over and over again that it is you Earthmen, more than any of the others, who are unique. For instance, it is only on Earth that life depends upon metal enzymes for respiration. Your people are the only ones which find hydrogen cyanide poisonous. Yours is the only form of intelligent life which is carnivorous. Yours is the only form of life which has not developed from a grazing animal. And, most interesting of all, yours is the only form of intelligent life known which stops growing upon reaching maturity."

Drake frowned at him. Rose felt her heart suddenly race. It was the nicest thing about him, that

grin, and he was using it perfectly naturally. It wasn't forced or false. He was *adjusting* to the presence of this alien creature. He was being pleasant—and he must be doing it for her. She loved that thought and repeated it to herself. He was doing it for her; he was being nice to the Hawkinsite for her sake.

Drake was saying with his grin, "You don't look very large, Dr. Tholan. I should say that you are an inch taller than I am, which would make you six feet two inches tall. Is it that you are young, or is it that the others on your world are generally small?"

"Neither," said the Hawkinsite. "We grow at a diminishing rate with the years, so that at my age it would take fifteen years to grow an additional inch, but—and this is the important point—we never *entirely* stop. And, of course, as a consequence, we never *entirely* die."

Drake gasped and even Rose felt herself sitting stiffly upright. This was something new. This was something which, to her knowledge, the few expeditions to Hawkin's Planet had never brought back. She was torn with excitement but held an exclamation back and let Drake speak for her.

He said, "They don't *entirely* die? You're not trying to say, sir, that the people on Hawkin's Planet are immortal?"

"No people are truly immortal.

If there were no other way to die, there would always be accident, and if that fails, there is boredom. Few of us live more than several centuries of your time. Still, it is unpleasant to think that death may come involuntarily. It is something which, to us, is extremely horrible. It bothers me even as I think of it now, this thought that *against my will and despite all care*, death may come."

"We," said Drake, grimly, "are quite used to it."

"You Earthmen live with the thought; we do not. And this is why we are disturbed to find that the incidence of Inhibition Death has been increasing in recent years."

"You have not yet explained," said Drake, "just what the Inhibition Death is, but let me guess. Is the Inhibition Death a pathological cessation of growth?"

"Exactly."

"And how long after growth's cessation does death follow?"

"Within the year. It is a wasting disease, a tragic one, and absolutely incurable."

"What causes it?"

THE Hawkinsite paused a long time before answering, and even then there was something strained and uneasy about the way he spoke. "Mr. Smollett, we know nothing about the cause of the disease."

Drake nodded thoughtfully. Rose was following the conversa-

tion as though she were a spectator at a tennis match.

Drake said, "And why do you come to Earth to study this disease?"

"Because again Earthmen are unique. They are the only intelligent beings who are immune. The Inhibition Death affects *all* the other races. Do your biologists know that, Mrs. Smollett?"

He had addressed her suddenly, so that she jumped slightly. She said, "No, they don't."

"I am not surprised. That piece of information is the result of very recent research. The Inhibition Death is easily diagnosed incorrectly and the incidence is much lower on the other planets. In fact, it is a strange thing, something to philosophize over, that the incidence of the Death is highest on my world, which is closest to Earth, and lower on each more distant planet—so that it is lowest on the world of the star Tempora, which is farthest from Earth, while Earth itself is immune. Somewhere in the biochemistry of the Earthite, there is the secret of that immunity. How interesting it would be to find it."

Drake said, "But look here, you can't say Earth is immune. From where I sit, it looks as if the incidence is a hundred per cent. All Earthmen stop growing and all Earthmen die. We've *all* got the Inhibition Death."

"Not at all. Earthmen live up to seventy years after the cessation

of growth. That is not the Death as we know it. Your equivalent disease is rather one of unrestrained growth. Cancer, you call it. —But come, I bore you."

Rose protested instantly. Drake did likewise with even more vehemence, but the Hawkinsite determinedly changed the subject. It was then that Rose had her first pang of suspicion, for Drake circled Harg Tholan warily with his words, worrying him, jabbing at him, attempting always to get the information back to the point where the Hawkinsite had left off. Not boldly, not unskillfully, but Rose knew him, and could tell what he was after. And what could he be after but that which was demanded by his profession? And, as though in response to her thoughts, the Hawkinsite took up the phrase which had begun careening in her mind like a broken record on a perpetual turntable.

HE ASKED, "Did you not say you were a policeman?"

Drake said, curtly, "Yes."

"Then there is something I would like to request you to do for me. I have been wanting to all this evening, since I discovered your profession, and yet I hesitate. I do not wish to be troublesome to my host and hostess."

"We'll do what we can."

"I have a profound curiosity as to how Earthmen live; a curiosity which is not perhaps shared by the





generality of my countrymen. So I wonder, could you show me through one of the police departments on your planet?"

"I do not belong to a police department in exactly the way you imagine," said Drake, cautiously. "However, I am known to the New York police department. I can manage it without trouble. Tomorrow?"

"That would be most convenient for me. Would I be able to visit the Missing Persons Bureau?"

"The what?"

The Hawkinsite drew his four standing legs closer together, as if he were becoming more intense. "It is a hobby of mine, a little queer corner of interest I have always had. I understand you have a group of police officers whose sole duty it is to search for men who are missing."

"And women and children," added Drake. "But why should that interest you so particularly?"

"Because there again you are unique. There is no such thing as a missing person on our planet. I

can't explain the mechanism to you, of course, but among the people of the other worlds, there is always an awareness of one another's presence, especially if there is a strong, affectionate tie. We are always aware of each other's exact location, no matter where on the planet we might be."

Rose grew excited again. The scientific expeditions to Hawkins' Planet had always had the greatest difficulty in penetrating the internal emotional mechanisms of the natives, and here was one who talked freely, who would explain! She forgot to worry about Drake and intruded into the conversation. "Can you feel such awareness even now? On Earth?"

The Hawkinsite said, "You mean across space? No, I'm afraid not. But you see the importance of the matter. All the uniquenesses of Earth should be linked. If the lack of this sense can be explained, perhaps the immunity to Inhibition Death can be, also. Besides, it strikes me as very curious that any

form of intelligent community life can be built up among people who lack this community awareness. How can an Earthman tell, for instance, when he has formed a congenial sub-group, a family? How can you two, for instance, know that there is a true tie between you?"

Rose found herself nodding. How strongly she missed such a sense!

But Drake only smiled. "We have our ways. It is as difficult to explain what we call 'love' to you as it is for you to explain your sense to us."

"I suppose so. Yet tell me truthfully, Mr. Smollett—if Mrs. Smollett were to leave this room and enter another without your having seen her do so, would you really not be aware of her location?"

"I really would not."

The Hawkinsite said, "Amazing." He hesitated, then added, "Please do not be offended at the fact that I find it revolting as well."

AFTER the light in the bedroom had been put out, Rose went to the door three times, opening it a crack and peering out. She could feel Drake watching her. There was a hard kind of amusement in his voice as he asked, finally, "What's the matter?"

She said, "I want to talk to you."

"Are you afraid our friend can hear?"

Rose was whispering. She got

into bed and put her head on his pillow so that she could whisper better. She said, "Why were you talking about the Inhibition Death to Dr. Tholan?"

"I am taking an interest in your work, Rose. You've always wanted me to take an interest."

"I'd rather you weren't sarcastic." She was almost violent, as nearly violent as she could be in a whisper. "I know that there's something of your own interest in this—of *police* interest, probably. What is it?"

He said, "I'll talk to you tomorrow."

"No, right now."

He put his hand under her head, lifting it. For a wild moment she thought he was going to kiss her—just kiss her on impulse the way husbands sometimes did, or as she imagined they sometimes did. Drake never did, and he didn't now.

He merely held her close and whispered, "Why are you so interested?"

His hand was almost brutally hard upon the nape of her neck, so that she stiffened and tried to draw back. Her voice was more than a whisper now. "Stop it, Drake."

He said, "I want no questions from you and no interference. You do your job, and I'll do mine."

"The nature of my job is open and known."

"The nature of my job," he retorted, "isn't, by definition. But I'll

tell you this. Our six-legged friend is here in this house for some definite reason. You weren't picked as biologist in charge for any random reason. Do you know that two days ago, he'd been inquiring about me at the Commission?"

"You're joking."

"Don't believe that for a minute. There are depths to this that you know nothing about. But that's my job and I won't discuss it with you any further. Do you understand?"

"No, but I won't question you if you don't want me to."

"Then go to sleep."

She lay stiffly on her back and the minutes passed, and then the quarter-hours. She was trying to fit the pieces together. Even with what Drake had told her, the curves and colors refused to blend. She wondered what Drake would say if he knew she had a recording of that night's conversation!

One picture remained clear in her mind at that moment. It hovered over her mockingly. The Hawkinsite, at the end of the long evening, had turned to her and said gravely, "Good night, Mrs. Smollett. You are a most charming hostess."

She had desperately wanted to giggle at the time. How could he call her a charming hostess? To him, she could only be a horror, a monstrosity with too few limbs and a too-narrow face.

And then, as the Hawkinsite delivered himself of this completely

meaningless piece of politeness, Drake had turned white! For one instant, his eyes had burned with something that looked like terror.

She had never before known Drake to show fear of anything, and the picture of that instant of pure panic remained with her until all her thoughts finally sagged into the oblivion of sleep.

IT WAS noon before Rose was at her desk the next day. She had deliberately waited until Drake and the Hawkinsite had left, since only then was she able to remove the small recorder that had been behind Drake's armchair the previous evening. She had had no original intention of keeping its presence secret from him. It was just that he had come home so late, and she couldn't say anything about it with the Hawkinsite present. Later on, of course, things had changed—

The placing of the recorder had been only a routine maneuver. The Hawkinsite's statements and intonations needed to be preserved for future intensive studies by various specialists at the Institute. It had been hidden in order to avoid the distortions of self-consciousness that the visibility of such a device would bring, and now it couldn't be shown to the members of the Institute at all. It would have to serve a different function altogether. A rather nasty function.

She was going to spy on Drake.

She touched the little box with her fingers and wondered, irrelevantly, how Drake was going to manage, that day. Social intercourse between inhabited worlds was, even now, not so commonplace that the sight of a Hawkinsite on the city streets would not succeed in drawing crowds. But Drake would manage, she knew. Drake always managed.

She listened once again to the sounds of last evening, repeating the interesting moments. She was dissatisfied with what Drake had told her. Why should the Hawkinsite have been interested in the two of them particularly? Yet Drake wouldn't lie. She would have liked to check at the Security Commission, but she knew she could not do that. Besides, the thought made her feel disloyal; Drake would definitely not lie.

But, then again, why should Harg Tholan not have investigated them? He might have inquired similarly about the families of all the biologists at the Institute. It would be no more than natural to attempt to choose the home he would find most pleasant by his own standards, whatever they were.

And if he had—even if he had investigated only the Smolletts—why should that create the great change in Drake from intense hostility to intense interest? Drake undoubtedly had knowledge he was keeping to himself. Only heaven knew how much.

Her thoughts churned slowly through the possibilities of interstellar intrigue. So far, to be sure, there were no signs of hostility or ill-feeling among any of the five intelligent races known to inhabit the Galaxy. As yet they were spaced at intervals too wide for enmity. Even the barest contact among them was all but impossible. Economic and political interests just had no points at which to conflict.

BUT that was only her idea and she was not a member of the Security Commission. If there were conflict, if there were danger, if there were any reason to suspect that the mission of a Hawkinsite might be other than peaceful—Drake would know.

Yet was Drake sufficiently high in the councils of the Security Commission to know, off-hand, the dangers involved in the visit of a Hawkinsite physician? She had never thought of his position as more than that of a very minor functionary in the Commission; he had never presented himself as more. And yet—

Might he be more?

She shrugged at the thought. It was reminiscent of Twentieth Century spy novels and of costume dramas of the days when there existed such things as atom bomb secrets.

The thought of costume dramas decided her. Unlike Drake, she wasn't a real policeman, and she

didn't know how a real policeman would go about it. But she knew how such things were done in the old dramas.

She drew a piece of paper toward her and, with a quick motion, slashed a vertical pencil mark down its center. She headed one column "Harg Tholan," the other "Drake." Under "Harg Tholan" she wrote "bonafide" and thoughtfully put three question marks after it. After all, was he a doctor at all, or was he what could only be described as an interstellar agent? What proof had even the Institute of his profession except his own statements? Was that why Drake had quizzed him so relentlessly concerning the Inhibition Death? Had he boned up in advance and tried to catch the Hawkinsite in an error?

For a moment, she was irresolute; then, springing to her feet, she folded the paper, put it in the pocket of her short jacket, and swept out of her office. She said nothing to any of those she passed as she left the Institute. She left no word at the reception desk as to where she was going, or when she would be back.

Once outside, she hurried into the third level tube and waited for an empty compartment to pass. The two minutes that elapsed seemed unbearably long. It was all she could do to say, "New York Academy of Medicine," into the mouthpiece just above the seat.

The door of the little cubicle

closed, and the sound of the air flowing past the compartment hissed upward in pitch.

THE New York Academy of Medicine had been enlarged both vertically and horizontally in the past two decades. The library, alone, occupied one entire wing of the third floor. Undoubtedly, if all the books, pamphlets and periodicals it contained were in their original printed form, rather than in microfilm, the entire building, huge though it was, would not have been sufficiently vast to hold them. As it was, Rose knew there was already talk of limiting printed works to the last five years, rather than to the last ten, as was now the case.

Rose, as a member of the Academy, had free entry to the library. She hurried toward the alcoves devoted to extraterrestrial medicine and was relieved to find them unoccupied.

It might have been wiser to have enlisted the aid of a librarian, but she chose not to. The thinner and smaller the trail she left, the less likely it was that Drake might pick it up.

And so, without guidance, she was satisfied to travel along the shelves, following the titles anxiously with her fingers. The books were almost all in English, though some were in German or Russian. None, ironically enough, were in extraterrestrial symbolisms. There was a room somewhere for such

originals, but they were available only to official translators.

Her traveling eye and finger stopped. She had found what she was looking for.

She dragged half a dozen volumes from the shelf and spread them out upon the small dark table. She fumbled for the light switch and opened the first of the volumes. It was entitled *Studies on Inhibition*. She leafed through it and then turned to the author index. The name of Harg Tholan was there.

One by one, she looked up the references indicated, then returned to the shelves for translations of such original papers as she could find.

She spent more than two hours in the Academy. When she was finished, she knew this much—there was a Hawkinsite doctor named Harg Tholan, who was an expert on the Inhibition Death. He was connected with the Hawkinsite research organization with which the Institute had been in correspondence. Of course, the Harg Tholan she knew might simply be impersonating an actual doctor to make the role more realistic, but why should that be necessary?

SHE took the paper out of her pocket and, where she had written "bonafide" with three question marks, she now wrote a YES in capitals. She went back to the Institute and at four P.M. was

once again at her desk. She called the switchboard to say that she would not answer any phone calls and then she locked her door.

Underneath the column headed "Harg Tholan" she now wrote two questions: "Why did Harg Tholan come to Earth alone?" She left considerable space. Then, "What is his interest in the Missing Persons Bureau?"

Certainly, the Inhibition Death was all the Hawkinsite said it was. From her reading at the Academy, it was obvious that it occupied the major share of medical effort on Hawkin's Planet. It was more feared there than cancer was on Earth. If they had thought the answer to it lay on Earth, the Hawkinsites would have sent a full-scale expedition. Was it distrust and suspicion on their part that made them send only one investigator?

What was it Harg Tholan had said the night before? The incidence of the Death was highest upon his own world, which was closest to Earth, lowest upon the world farthest from Earth. Add to that the fact implied by the Hawkinsite, and verified by her own readings at the Academy, that the incidence had expanded enormously since interstellar contact had been made with Earth . . .

Slowly and reluctantly she came to one conclusion. The inhabitants of Hawkin's Planet might have decided that somehow Earth had discovered the cause of the Inhibition

Death, and was deliberately fostering it among the alien peoples of the Galaxy, with the intention, perhaps, of becoming supreme among the stars.

She rejected this conclusion with what was almost panic. It could not be; it was impossible. In the first place, Earth *wouldn't* do such a horrible thing. Secondly, it *couldn't*.

As far as scientific advance was concerned, the beings of Hawkin's Planet were certainly the equals of Earthmen. The Death had occurred there for thousands of years and their medical record was one of total failure. Surely, Earth, in its long-distance investigations into alien biochemistry, could not have succeeded so quickly. In fact, as far as she knew, there were no investigations to speak of into Hawkinian pathology on the part of Earth biologists and physicians.

Yet all the evidence indicated that Harg Tholan had come in suspicion and had been received in suspicion. Carefully, she wrote down under the question, "Why did Harg Tholan come to Earth alone?" the answer, "Hawkin's Planet *believes* Earth is causing the Inhibition Death."

But, then, what was this business about the Bureau of Missing Persons? As a scientist, she was rigorous about the theories she developed. *All* the facts had to fit in, not merely some of them.

Missing Persons Bureau! If it

was a false trail, deliberately intended to deceive Drake, it had been done clumsily, since it came only after an hour of discussion of the Inhibition Death.

Was it intended as an opportunity to study Drake? If so, why? Was this perhaps the *major* point? The Hawkinsite had investigated Drake before coming to them. Had he come because Drake was a policeman with entry to Bureaus of Missing Persons?

But why? Why?

SHE gave it up and turned to the column headed "Drake."

And there a question wrote itself, not in pen and ink upon the paper, but in the much more visible letters of thought on mind. *Why did he marry me?* thought Rose, and she covered her eyes with her hands so that the unfriendly light was excluded.

They had met quite by accident somewhat more than a year before, when he had moved into the apartment house in which she then lived. Polite greetings had somehow become friendly conversation and this, in turn, had led to occasional dinners in a neighborhood restaurant. It had been very friendly and normal and an excitingly new experience, and she had fallen in love.

When he asked her to marry him, she was pleased—and overwhelmed. At the time, she had many explanations for it. He appreciated

her intelligence and friendliness. She was a nice girl. She would make a good wife, a splendid companion.

She had tried all those explanations and had half-believed every one of them. But half-belief was not enough.

It was not that she had any definite fault to find in Drake as a husband. He was always thoughtful, kind and a gentleman. Their married life was not one of passion, and yet it suited the paler emotional surges of the late thirties. She wasn't nineteen. What did she expect?

That was it; she wasn't nineteen. She wasn't beautiful, or charming, or glamorous. What did she expect? Could she have expected Drake—handsome and rugged, whose interest in intellectual pursuits was quite minor, who neither asked about her work in all the months of their marriage, nor offered to discuss his own with her? Why, then, did he marry her?

But there was no answer to that question, and it had nothing to do with what Rose was trying to do now. It was extraneous, she told herself fiercely; it was a childish distraction from the task she had set herself. She was acting like a girl of nineteen, after all, with no chronological excuse for it.

She found that the point of her pencil had somehow broken, and took a new one. In the column headed "Drake" she wrote, "Why

is he suspicious of Harg Tholan?" and under it she put an arrow pointing to the other column.

What she had already written there was sufficient explanation. If Earth were spreading the Inhibition Death, or if Earth knew it was suspected of such a deed, then, obviously, it would be preparing for eventual retaliation on the part of the aliens. In fact, the setting would actually be one of preliminary maneuvering for the first interstellar war of history. It was an adequate but horrible explanation.

Now there was left the second question, the one she could not answer. She wrote it slowly. "Why Drake's reaction to Tholan's words, 'You are a most charming hostess.'?"

SHE tried to bring back the exact setting. The Hawkinsite had said it innocuously, matter-of-factly, politely, and Drake had frozen at the sound of it. Over and over, she had listened to that particular passage in the recording. An Earthman might have said it in just such an inconsequential tone on leaving a routine cocktail party. The recording did not carry the sight of Drake's face; she had only her memory for that. Drake's eyes had become alive with fear and hate, and Drake was one who feared practically nothing. What was there to fear in the phrase, "You are a most charming hostess," that could upset him so? Jealousy? Abound.

The feeling that Tholan had been sarcastic? Maybe, though unlikely. She was sure Tholan was sincere.

She gave it up and put a large question mark under that second question. There were two of them now, one under "Harg Tholan" and one under "Drake." Could there be a connection between Tholan's interest in missing persons and Drake's reaction to a polite party phrase? She could think of none.

She put her head down upon her arms. It was getting dark in the office and she was very tired. For a while, she must have hovered in that queer land between waking and sleeping, when thoughts and phrases lose the control of the conscious and disport themselves erratically and surrealistically through one's head. But, no matter where they danced and leaped, they always returned to that one phrase, "You are a most charming hostess." Sometimes she heard it in Harg Tholan's cultured, lifeless voice, and sometimes in Drake's vibrant one. When Drake said it, it was full of love, full of a love she never heard from him. She liked to hear him say it.

She startled herself to wakefulness. It was quite dark in the office now, and she put on the desk light. She blinked, then frowned a little. Another thought must have come to her in that fitful half-sleep. There had been another phrase which had upset Drake. What was it? Her

forehead furrowed with mental effort. It had not been last evening. It was not anything in the recorded conversation, so it must have been before that. Nothing came and she grew restless.

Looking at her watch, she gasped. It was almost eight. They would be at home waiting for her.

But she did not want to go home. She did not want to face them. Slowly, she took up the paper upon which she had strawled her thoughts of the afternoon, tore it into little pieces and let them flutter into the little atomic-flash ash-tray upon her desk. They were gone in a little flare and nothing was left of them.

If only nothing were left of the thoughts they represented as well.

It was no use. She would have to go home.

THEY were not there waiting for her, after all. She came upon them getting out of a gyro-cab just as she emerged from the tubes on to street level. The gyro-cabbie, wide-eyed, gazed after his fares for a moment, then hovered upward and away. By unspoken mutual consent, the three waited until they had entered the apartment before speaking.

Rose said disinterestedly, "I hope you have had a pleasant day, Dr. Tholan."

"Quite. And a fascinating and profitable one as well, I think."

"Have you had a chance to eat?"

though Rose had not herself eaten, she was anything but hungry.

"Yes, indeed."

Drake interrupted, "We had lunch and supper sent up to us. Sandwiches." He sounded tired.

Rose said, "Hello, Drake." It was the first time she had addressed him.

Drake scarcely looked at her. "Hello."

The Hawkinsite said, "Your tomatoes are remarkable vegetables. We have nothing to compare with them in taste on our own planet. I believe I ate two dozen, as well as an entire bottle of tomato derivative."

"Ketchup," explained Drake, briefly.

Rose said, "And your visit at the Missing Persons Bureau, Dr. Tholan? You say you found it profitable?"

"I should say so. Yes."

Rose kept her back to him. She plumped up sofa cushions as she said, "In what way?"

"I find it most interesting that the large majority of missing persons are males. Wives frequently report missing husbands, while the reverse is practically never the case."

Rose said, "Oh, that's not mysterious, Dr. Tholan. You simply don't realize the economic setup we have on Earth. On this planet, you see, it is the male who is usually the member of the family that maintains it as an economic unit.

He is the one whose labor is repaid in units of currency. The wife's function is generally that of taking care of home and children."

"Surely this is not universal?"

Drake put in, "More or less. If you are thinking of my wife, she is an example of the minority of women who are capable of making their own way in the world."

Rose looked at him swiftly. Was he being sarcastic?

THE Hawkinsite said, "Your implication, Mrs. Smollett, is that women, being economically dependent upon their male companions, find it less feasible to disappear?"

"That's a gentle way of putting it," said Rose, "but that's about it."

"And would you call the Missing Persons Bureau of New York a fair sampling of such cases in the planet at large?"

"Why, I should think so."

The Hawkinsite said, abruptly, "And is there, then, an economic explanation for the fact that since interstellar travel has been developed, the percentage of young males among the missing is more pronounced than ever?"

It was Drake who answered, with a verbal snap. "Good lord, that's even less of a mystery than the other. Nowadays, the runaway has all space to disappear into. Anyone who wants to get away from trouble need only hop the nearest space freighter. They're always

looking for crewmen, no questions asked, and it would be almost impossible to locate the runaway after that, if he really wanted to stay out of circulation."

"And almost always young men in their first year of marriage."

Rose laughed suddenly. She said, "Why, that's just the time a man's troubles seem the greatest. If he survives the first year, there is usually no need to disappear at all."

Drake was obviously not amused. Rose thought again that he looked tired and unhappy. *Why* did he insist on bearing the load alone? And then she thought that perhaps he had to.

The Hawkinsite said, suddenly, "Would it offend you if I disconnected for a period of time?"

Rose said, "Not at all. I hope you haven't had too exhausting a day. Since you come from a planet whose gravity is greater than that of Earth's, I'm afraid we too easily presume that you would show greater endurance than we do."

"Oh, I am not tired in a physical sense." He looked for a moment at her legs and blinked very rapidly, indicating amusement. "You know, I keep expecting Earthmen to fall either forward or backward in view of their meager equipment of standing limbs. You must pardon me if my comment is overfamiliar, but your mention of the lesser gravity of Earth brought it to my mind. On my planet, two legs would simply not be enough. But

this is all beside the point at the moment. It is just that I have been absorbing so many new and unusual concepts that I feel the desire for a little disconnection."

Rose shrugged inwardly. Well, that was as close as one race could get to another, anyway. As nearly as the expeditions to Hawkin's Planet could make out, Hawkinsites had the faculty for disconnecting their conscious mind from all its bodily functions and allowing it to sink into an undisturbed meditative process for periods of time lasting up to terrestrial days. Hawkinsites found the process pleasant, even necessary sometimes, though no Earthman could truly say what function it served.

Conversely, it had never been entirely possible for Earthmen to explain the concept of "sleep" to a Hawkinsite, or to any extraterrestrial. What an Earthman would call sleep or a dream, a Hawkinsite would view as an alarming sign of mental disintegration. Rose thought uneasily, *Here is another way Earthmen are unique.*

The Hawkinsite was backing away, drooping so that his forelimbs swept the floor in polite farewell. Drake nodded curtly at him as he disappeared behind the bend in the corridor. They heard his door open, close, then silence.

AFTER minutes in which the silence was thick between them, Drake's chair creaked as he

shifted restlessly. With a mild horror, Rose noticed blood upon his lips. She thought to herself, *He's in some kind of trouble. I've got to talk to him. I can't let it go on like this.*

She said, "Drake!"

Drake seemed to look at her from a far, far distance. Slowly, his eyes focused closer at hand and he said, "What is it? Are you through for the day, too?"

"No, I'm ready to begin. It's the tomorrow you spoke of. Aren't you going to speak to me?"

"Pardoo me?"

"Last night, you said you would speak to me tomorrow. I am ready now."

DRAKE frowned. His eyes withdrew beneath a lowered brow and Rose felt some of her resolution begin to leave her. He said, "I thought it was agreed that you would not question me about my business in this matter."

"I think it's too late for that. I know too much about your business by now."

"What do you mean?" he shouted, jumping to his feet. Recollecting himself, he approached, laid his hands upon her shoulders and repeated in a lower voice, "What do you mean?"

Rose kept her eyes upon her hands, which rested limply in her lap. She bore the painfully gripping fingers patiently, and said slowly, "Dr. Tholan thinks that Earth is

spreading the Inhibition Death purposely. That's it, isn't it?"

She waited. Slowly, the grip relaxed and he was standing there, hands at his side, face baffled and unhappy. He said, "Where did you get that notion?"

"It's true, isn't it?"

He said breathlessly, unnaturally, "I want to know exactly why you say that. Don't play foolish games with me, Rose. This is for keeps."

"If I tell you, will you answer one question?"

"What question?"

"Is Earth spreading the disease deliberately, Drake?"

Drake flung his hands upward. "Oh, for Heaven's sake!"

He knelt before her. He took both her hands in his and she could feel their trembling. He was forcing his voice into soothing, loving syllables.

He was saying, "Rose dear, look, you've got something red-hot by the tail and you think you can use it to tease me in a little husband-wife repartee. Now, I'm not asking much. Just tell me exactly what causes you to say what—what you have just said." He was terribly earnest about it.

"I was at the New York Academy of Medicine this afternoon. I did some reading there."

"But why? What made you do it?"

"You seemed so interested in the Inhibition Death, for one thing. And Dr. Tholan made those state-

ments about the incidence increasing since interstellar travel, and being the highest on the planet nearest Earth." She paused.

"And your reading?" he prompted. "What about your reading, Rose?"

SHE said, "It backs him up. All I could do was to skim hastily into the direction of their research in recent decades. It seems obvious to me, though, that at least some of the Hawkinsites are considering the possibility the Inhibition Death originates on Earth."

"Do they say so outright?"

"No. Or, if they have, I haven't seen it." She gazed at him in surprise. In a matter like this, certainly the government would have investigated Hawkinsite research on the matter. She said, gently, "Don't you know about Hawkinsite research in the matter, Drake? The government—"

"Never mind about that." Drake had moved away from her and now he turned again. His eyes were bright. He said, as though making a wonderful discovery, "Why, you're an expert in this!"

Was she? Did he find that out only now that he needed her? Her nostrils flared and she said flatly, "I am a biologist."

He said, "Yes, I know that, but I mean your particular specialty is growth. Didn't you once tell me you had done work on growth?"

"You might call it that. I've had

twenty papers published on the relationship of nucleic acid 'fine structure' and embryonic development on my Cancer Society grant."

"Good. I should have thought of that." He was choked with a new excitement. "Tell me, Rose—Look, I'm sorry if I lost my temper with you a moment ago. You'd be as competent as anyone to understand the direction of their researches if you read about it, wouldn't you?"

"Fairly competent, yes."

"Then tell me how they think the disease is spread. The details, I mean."

"Oh, now look, that's asking a little too much. I spent a few hours in the Academy, that's all. I'd need much more time than that to be able to answer your question."

"An intelligent guess, at least. You can't imagine how important it is."

She said, doubtfully, "Of course, 'Studies on Inhibition' is a major treatise in the field. It would summarize all of the available research data."

"Yes? And how recent is it?"

"It's one of those periodic things. The last volume is about a year old."

"Does it have any account of *his* work in it?" His finger jabbed in the direction of Harg Tholan's bedroom.

"More than anyone else's. He's an outstanding worker in the field. I looked over his papers especially."



"And what are his theories about the origin of the disease. Try to remember, Rose."

She shook her head at him. "I could swear he blames Earth, but he admits they know nothing about how the disease is spread. I could swear to that, too."

He stood stiffly before her. His strong hands were clenched into fists at his side and his words were scarcely more than a muster. "It could be a matter of complete over-estimation. Who knows—"

He whirled away. "I'll find out about this right now, Rose. Thank you for your help."

She ran after him. "What are you going to do?"

"Ask him a few questions." He was rummaging through the drawers of his desk and now his right hand withdrew. It held a needle-gun.

She cried, "No, Drake!"

He shook her off roughly, and turned down the corridor toward the Hawkinsite's bedroom.

DRAKE threw the door open and entered. Rose was at his heels, still trying to grasp his arm, but now she stopped and looked at Harg Tholan.

The Hawkinsite was standing there motionless, eyes unfocused, his four standing limbs sprawled out in four directions as far as they would go. Rose felt ashamed of intruding, as though she were violating an intimate rite. But Drake, apparently unconcerned, walked to within four feet of the creature and stood there. They were face to face, Drake holding the needle-gun easily at a level of about the center of the Hawkinsite's torso.

Drake said, "Now keep quiet. He'll gradually become aware of me."

"How do you know?"

The answer was flat. "I know. Now get out of here."

But she did not move and Drake was too absorbed to pay her further attention.

Portions of the skin on the Hawkinsite's face were beginning

to quiver slightly. It was rather repulsive and Rose found herself preferring not to watch.

Drake said suddenly, "That's about all, Dr. Tholan. Don't throw in connection with any of the limbs. Your sense organs and voice box will be quite enough."

The Hawkinsite's voice was dim. "Why do you invade my disconnection chamber?" Then, more strongly, "And why are you armed?"

His head wobbled slightly atop a still frozen torso. He had, apparently, followed Drake's suggestion against limb connection. Rose wondered how Drake knew such partial reconnection to be possible. She herself had not known of it.

The Hawkinsite spoke again. "What do you want?"

And this time Drake answered. He said, "The answer to certain questions."

"With a gun in your hand? I would not humor your discourtesy so far."

"You would not merely be humoring me. You might be saving your own life."

"That would be a matter of considerable indifference to me, under the circumstances. I am sorry, Mr. Smollett, that the duties toward a guest are so badly understood on Earth."

"You are no guest of mine, Dr. Tholan," said Drake. "You entered my house on false pretenses. You had some reason for it, some way

you had planned of using me to further your own purposes. I have no compunction in reversing the process."

"You had better shoot. It will save time."

"You are convinced that you will answer no questions? That, in itself, is suspicious. It seems that you consider certain answers to be more important than your life."

"I consider the principles of courtesy to be very important. You, as an Earthman, may not understand."

"Perhaps not. But I, as an Earthman, understand one thing." Drake had jumped forward, faster than Rose could cry out, faster than the Hawkinsite could connect his limbs. When he sprang backward, the flexible hose of Harg Tholan's cyanide cylinder was in his hand. At the corner of the Hawkinsite's wide mouth, where the hose had once been affixed, a droplet of colorless liquid oozed sluggishly from a break in the rough skin, and slowly solidified into a brown jellylike globule, as it oxidized.

DRAKE yanked at the hose and the cylinder jerked free. He plunged home the knob that controlled the needle valve at the head of the cylinder and the small hissing ceased.

"I doubt," said Drake, "that enough will have escaped to endanger us. I hope, however, that you realize what will happen to

you now, if you do not answer the questions I am going to ask you—and answer them in such a way that I am convinced you are being truthful."

"Give me back my cylinder," said the Hawkinsite, slowly. "If not, it will be necessary for me to attack you and then it will be necessary for you to kill me."

Drake stepped back. "Not at all. Attack me and I shoot your legs from under you. You will lose them; all four, if necessary, but you will still live, in a horrible way. You will live to die of cyanide lack. It would be a most uncomfortable death. I am only an Earthman and I can't appreciate its true horrors, but you can, can't you?"

The Hawkinsite's mouth was open and something within quivered yellow-green. Rose wanted to throw up. She wanted to scream, *Give him back the cylinder, Drake!* But nothing would come. She couldn't even turn her head.

Drake said, "You have about an hour, I think, before the effects are irreversible. Talk quickly, Dr. Tholan, and you will have your cylinder back."

"And after that—" said the Hawkinsite.

"After that, what does it matter to you? Even if I kill you then, it will be a clean death; not cyanide lack."

Something seemed to pass out of the Hawkinsite. His voice grew guttural and his words blurred as

though he no longer had the energy to keep his English perfect. He said, "What are your questions?" and as he spoke, his eyes followed the cylinder in Drake's hand.

Drake swung it deliberately, tantalizingly, and the creature's eyes followed—followed—

Drake said, "What are your theories concerning the Inhibition Death? Why did you really come to Earth? What is your interest in the Missing Persons Bureau?"

Rose found herself waiting in breathless anxiety. These were the questions she would like to have asked, too. Not in this manner, perhaps, but in Drake's job, kindness and humanity had to take second place to necessity.

She repeated that to herself several times in an effort to counteract the fact that she found herself loathing Drake for what he was doing to Dr. Tholan.

THE Hawkinsite said, "The proper answer would take more than the hour I have left me. You have bitterly shamed me by forcing me to talk under duress. On my own planet, you could not have done so under any circumstances. It is only here, on this revolting planet, that I can be deprived of cyanide."

"You are wasting your hour, Dr. Tholan."

"I would have told you this eventually, Mr. Smollett. I needed your help. It is why I came here."

"You are still not answering my questions."

"I will answer them now. For years, in addition to my regular scientific work, I have been privately investigating the cells of my patients suffering from Inhibition Death. I have been forced to use the utmost secrecy and to work without assistance, since the methods I used to investigate the bodies of my patients were frowned upon by my people. Your society would have similar feelings against human vivisection, for instance. For this reason, I could not present the results I obtained to my fellow physicians until I had verified my theories here on Earth."

"What were your theories?" demanded Drake. The feverishness, had returned to his eyes.

"It became more and more obvious to me as I proceeded with my studies that the entire direction of research into the Inhibition Death was wrong. The answer was neither bacterial nor viral."

Rose interrupted, "Surely, Dr. Tholan, it isn't psychosomatic."

A thin, gray, translucent film had passed over the Hawkinsite's eyes. He no longer looked at them. He said, "No, Mrs. Smollett, it is not psychosomatic. It is a true infection, but more subtle than could be expected of either bacteria or viruses. I worked with Inhibition Death patients of other races than my own, and the conclusion was eventually forced upon me. There

is a whole variety of infection never yet suspected by the medical science of any of the planets."

Rose said, faintly, "This is wild, impossible. You must be mistaken, Dr. Tholan."

"I am not mistaken. Until I came to Earth, I thought I might be. But my stay at the Institute, my researches at the Missing Persons Bureau have convinced me that this is not so. What is so impossible about the concept of a supremely subtle, yet unsuspected class of infections? The very subtlety would militate against their discovery. In your history and in ours, there were thousands of years in which the causes of bacterial infections were unknown. And when tools were developed capable of studying bacteria, viruses remained unknown for generations.

"Is it impossible to proceed a step further? Bacteria, by and large, are extracellular creatures. They compete with the cells of the body for foodstuffs, sometimes too successfully, and they release their waste products, or toxins, into the bloodstream. The virus goes a step further. It lives within the cell, utilizing cellular machinery for its own purposes. You know all this, Mrs. Smollett, so I need not elaborate. Perhaps your husband knows it as well."

"GO ON," said Drake.

"Proceed one more stage, then. Imagine a parasite that lives

not only inside the cell, but inside the *chromosomes* of the cell. In other words, a parasite that takes its place along with the genes, so that it is something we might call a pseudo-gene. It would have a hand in the manufacture of enzymes, which is the primary function of genes, and in that way a very firm finger in the biochemistry of the terrestrial organism."

Rose said, "Why particularly the terrestrial?"

"Have you not surmised that the pseudo-gene I speak of is a native of Earth. Terrestrial beings from the beginning have lived with it, have adapted to it, are unconscious of it. These pseudo-genes feed on the *organization* of the body. Bacteria feed on the foodstuffs, viruses on the cells, pseudo-genes on the economy of the cellular macro-structure as a whole through their control of the body's biochemistry. It is why the higher species of terrestrial animals, including man, do not grow after maturity, and, eventually, die what is called natural death. It is the inevitable end result of this universal parasitic infestation."

"A disease of the soul—" Rose said, wistfully.

The Hawkinsite said, "What is the soul?"

"For heaven's sake," said Drake, abruptly, "do not get mystical, Rose!"

She flushed. "I'm sorry. Go on, Dr. Tholan."

"As a pseudo-gene, it is perfectly obvious how the universal disease is transmitted. It is placed along with the true genes in every ovum or spermatozoon formed by the infected organism. Every organism is already infected at the moment of conception. But there is another form of transmission—there *must* be to account for all the facts. Chemically, genes and viruses are similar, since both are nuclear proteins. A pseudo-gene can, therefore, exist independently of the chromosomes.

"Perhaps it infects a virus, or perhaps it forms a viruslike body itself at some stage of its development. As such, it can be transmitted in the ordinary fashion of other viral infections—by contact, by air, through waste materials and so on. Naturally, Earthmen have nothing to fear from such contact; they are already infected. On Earth, such a process is purely vestigial, dating back to the days when infections could yet be made. It is different on the extraterrestrial worlds, however."

"I see," said Rose.

"I don't," objected Drake, bluntly.

THE Hawkinsite sighed. "We of the other worlds have not lived with these parasites for millions of years, as man and his ancestors had. We have not adapted ourselves to it. Our weak strains have not been killed off gradually through hun-

dreds of generations until only the resistants were left. So, where Earthmen could survive the infection decades with little harm, we others, once infected by the viral stage of the disease, die a quick death within a year."

Rose said, "And is that why the incidence has increased since interstellar travel between Earth and the other planets began?"

"Yes. There were infections previously. It has long been suspected that bacterial spores and virus molecules can drift off into space and through it. Absolute zero will not kill them, but rather keep them alive indefinitely. Statistically, a certain percentage of them will reach other planets. Before space travel there were cases which could be accounted for, perhaps, by such a mechanism. Since then, it has increased ten thousand times and more."

For a moment there was silence, and then the Hawkinsite said with a sudden access of energy, "Give me back my cylinder. You have your answer."

Drake said, coolly, "What about the Missing Persons Bureau?" He was swinging the cylinder again; but now the Hawkinsite did not follow its movements. The gray translucent film on his eyes had deepened and Rose wondered whether that was simply an expression of weariness or an example of the changes induced by cyanide lack.

The Hawkinsite said, "As we are not well adapted to the pseudo-genes that infest man, neither are they well adapted to us. It can live on us, but it cannot reproduce with ourselves alone as the source of its life. Infections of Inhibition Death before the advent of space travel set off tiny epidemics that would last through ten or twenty transfers, growing gradually milder, until it died out altogether. Now, the disease transfers indefinitely, getting milder where thorough quarantines are imposed and then, suddenly and erratically, growing completely virulent again."

Rose looked at him with a growing horror. "What are you implying, Dr. Tholan?"

He said, "The Earthman remains the prime host for the parasite. An Earthman may infect one of us if he remains among us. But the pseudo-gene, once located within our cells, cannot maintain its vigor indefinitely. Sooner or later, within twenty infections, perhaps, it must somehow return to an Earthman, if it expects to continue reproduction. Before interstellar travel this was possible only by returning through space, which was so unlikely as to be considered zero. Now—"

ROSE said faintly, "The missing persons."

"Yes. They are the intermediate hosts. Almost all the young men who disappeared in the last decade were space-travelers. They had been

on other inhabited planets at least once in their lives. Once the period of incubation within the human being has transpired, they return to an outer planet. He disappears, as far as Earth is concerned."

"But this is impossible," insisted Rose. "What you say implies that the pseudo-gene can control the actions of its host! This cannot be!"

"Why not? They control the biochemistry, at least in part, by their very role as pseudo-genes. There is no intelligence, or even instinct, behind their control. It is purely chemical. If adrenalin is injected into your bloodstream, there is no imposition of a superior intelligence that makes your heart double its rate, your breathing quicken, your clotting time decrease, your blood vessels dilate—purely chemical."

"—But I am quite ill now and cannot speak much longer. I have only this to say. In this pseudo-gene, your people and mind have a common enemy. Earthmen, too, need not die involuntarily. I thought that perhaps if I found myself unable to return to my own world with my information, due to my own infection, perhaps, I might bring it to the authorities on Earth, and ask their help in stamping out this menace. Imagine my pleasure when I found that the husband of one of the biologists at the Institute was a member of one of Earth's most important investigating bodies. Naturally, I did what I could to be a guest at his home in order that I

might deal with him privately; convince him of the terrible truth; utilize his position to help in the attack on the parasites.

"This is, of course, now impossible. I cannot blame you too far. As Earthmen, you cannot be expected to understand thoroughly the psychology of my people. Nevertheless, you must understand this. I can have no further dealing with either of you. I could not even bear to remain any longer on Earth."

Drake said, "Then you, alone, of all your people have any knowledge of this theory of yours."

"I alone."

Drake held out the cylinder. "Your cyanide, Dr. Tholan."

The Hawkinsite groped for it eagerly. His supple fingers manipulated the hose and the needle valve with the utmost delicacy. In the space of ten seconds, he had it in place and was inhaling the gas in huge breaths. His eyes were growing clear and transparent.

Drake waited until the Hawkinsite breathings had subsided to normal, and then, without expression, he raised his needle-gun and fired.

Rose screamed. The Hawkinsite remained standing. His four lower limbs were incapable of buckling, but his head lolled and, from his suddenly flaccid mouth, the cyanide hose fell, disregarded.

Once again, Drake closed the

needle valve and now he tossed the cylinder aside and stood there somberly, looking at the dead creature.

There was no external mark to show that Tholan had been killed. The needle-gun's pellet, thinner than the needle which gave the gun its name, entered the body noiselessly and easily, and exploded with devastating effect only within the abdominal cavity.

Rose ran from the room, still screaming.

Drake pursued her, seized her arm. She heard the hard, brisk sounds of his palms upon her face without feeling them and subsided into little bubbling sobs.

Drake said, "I told you to have nothing to do with this. Now, what do you think you're going to do?"

She said, "Let me go. I want to leave. I want to go away."

"Because of something it was my job to do? You heard what the creature was saying. Do you suppose I could allow him to return to his world and spread those lies? They would believe him. And what do you think would happen then? Can you guess what an interstellar war might be like? They would imagine they would have to kill us all to stop the disease."

With an effort that seemed to turn her inside out, Rose steadied. She looked firmly into Drake's eyes and said, "What Dr. Tholan said were no lies and no mistakes, Drake."

"Oh, come now, you're hysterical. You need sleep."

"No, Drake. I know what he said is so because the Security Commission knows all about that same theory, and knows it to be true."

"Why do you say such a preposterous thing?"

"Because you let that slip yourself twice."

Drake said, "Sit down."

She did so, and he stood there, looking curiously at her.

He said, "So I have given myself away twice, have I? You've had a busy day of detection, my dear. You have facets you keep well hidden." He sat down and crossed his legs.

ROSE thought, *Yes, I've had a busy day.* She could see the electric clock on the kitchen wall from where she sat and it was more than two hours past midnight. Harg Tholan had entered their house thirty-five hours before; and now he lay murdered in the spare bedroom.

Drake said, "Well, aren't you going to tell me where I pulled my two boners?"

"You turned white when Harg Tholan referred to me as a charming hostess. Hostess has a double meaning, you know, Drake. A host is one who harbors a parasite."

"Number one," said Drake. "What's number two?"

"That's something you did before Harg Tholan entered the

house. I've been trying to remember it for hours. Do you remember, Drake? You spoke about how unpleasant it was for Hawkinsites to associate with Earthmen, and I said Harg Tholan was a doctor and had to. I asked you if you thought that human doctors particularly enjoyed going to the tropics, or letting infected mosquitoes bite them. Do you remember how upset you became?"

Drake laughed shortly. "I had no idea I was so transparent. Mosquitoes are hosts for the malaria and yellow fever parasites." He sighed. "I've done my best to keep you out of this, Rose. I tried to keep the Hawkinsite away. I tried threatening you. Now, there's nothing left but to tell you the truth. I must, because only the truth—or death—will keep you quiet. And I don't want to kill you."

Rose shrank back in her chair, eyes wide.

Drake said, "The Commission knows the truth, yes. It does us no good. We can only do all in our power to prevent the other worlds from finding out."

"But that is impossible! The truth can't be held down forever. Harg Tholan found out. You've killed him, but another extraterrestrial will repeat the same discovery—over and over again. You can't kill them all."

"We know that, too," agreed Drake. "But we have no choice."

"Why?" cried Rose. "Harg Tho-

Lin gave you the solution. He made no suggestions or threats regarding enmity and war between worlds. He said something, instead, for which I admired him. He suggested that we combine with the other intelligences and help to wipe out the parasite. And we can—we *can*! If we, in common with all the others, put every scrap of effort into it—"

"You mean we can trust him? Does he speak for his government? Or for the other races?"

"Can we dare to refuse the risk?"

Deake said, "No, Rose, you don't understand." He reached toward her and took one of her cold, unresisting hands between both of his. He went on, "I may seem silly trying to teach you anything about your specialty, but I want you to hear me out. Harg Tholan was right. Man and his prehistoric ancestors have been living with this pseudo-gene for uncounted ages; certainly for a much longer period than we have been truly *Homo sapiens*. In that interval, we have not only become adapted to it, we have become dependent upon it. It is no longer a case of parasitism. It is a case of mutual cooperation."

SHE tore her hand away. "What are you talking about?"

"We have a disease of our own, remember. It is a reverse disease; one of unrestrained growth. We've mentioned it already as a contrast to the Inhibition Death. Well, what

is the cause of cancer? How long have biologists, physiologists, biochemists and all the others been working on it? How much success have they had with it? Why? Can't you answer that for yourself now?"

Rose frowned at him. She said, slowly, "No, I can't. What are you talking about?"

"It's all very well to say that if we could remove the parasite, we would once again have the privilege of eternal growth and life if we wanted it; or least until we got tired of being too big or of living too long, and did away with ourselves neatly. But how many millions of years has it been since the human body has had occasion to grow in such an unrestrained fashion? Can it do so any longer? Is the chemistry of the body adjusted to that? Has it got the proper whatchamacallits?"

"Enzymes," prompted Rose in a whisper.

"Yes, enzymes. It's impossible for us. If, for any reason, the pseudo-gene, as Harg Tholan calls it, does leave the human body, or if its relationship to the human mind is in any way impaired, growth does take place, but not in any orderly fashion. We call the growth cancer.

"And there you have it, Rose. There's no way of getting rid of the parasite. We're together for all eternity. So that to get rid of their Inhibition Death, extraterrestrials must first wipe out all vertebrate life on Earth. There is no other

solution for them, and so we must keep knowledge of it from them. Do you understand?"

She rose from her chair. Her mouth was dry and it was difficult to talk. "I understand, Drake."

She noticed that his forehead was damp and that there was a line of perspiration down each cheek.

She said, tightly, "And now you'll have to get it out of the apartment."

"I know. I've made arrangements. It's late at night and I'll be able to get the body out of the building. From there on—" he turned to her—"I don't know when I'll be back."

Rose said again, "I understand, Drake."

Harg Tholan was heavy. Drake had to drag him through the apartment. Rose turned away, retching. She hid her eyes until she heard the front door close. She whispered again to herself, "I understand, Drake."

IT WAS 3 A. M. Nearly an hour had passed since she had heard the front door click gently into place behind Drake and his burden. She didn't know where he was going, what he intended doing—

She sat there numbly. There was no desire to sleep; no desire to move. She kept her mind traveling in tight circles, away from the thing she knew and which she wanted not to know.

Pseudo-genes!

Was it only a coincidence or was it some queer racial memory, some tenuous long-sustained wisp of tradition or insight, stretching back through incredible millennia, that kept current the odd myths of human beginnings? The stories of the golden ages, the Gardens of Eden in which Man had eternal life, until he lost it.

She had called the pseudo-genes a disease of the soul. Was that the memory again? The memory of the world in which sin entered, in which the soul grew diseased, and into which, as a consequence, death entered?

Yet despite her efforts, the circle of her thoughts expanded, and returned to Drake. She shoved and it returned; she counted to herself, she recited the names of the objects in her field of vision, she cried, *No, no, no*, and it returned. It kept returning.

Drake had lied to her. It had been a plausible story. It would have held good under most circumstances; but Drake was not a biologist.

Cancer could not be, as Drake had said, a disease that was an expression of a lost ability for any normal growth.

Cancer attacked children while they were still growing; it could even attack embryonic tissue. It attacked fish, which, like extraterrestrials, never stopped growing while they lived, and died only by disease or accident. It attacked plants, for

many of which the same could be said.

Cancer had nothing to do with the presence or absence of normal growth. It was the general disease of life, to which *no* tissues of *any* multicellular organism were completely immune.

He should not have bothered lying. He should not have allowed some obscure sentimental weakness to persuade him to avoid the necessity of killing her in that manner. She would tell them at the Institute. The parasite *could* be beaten! Its absence would *not* cause cancer. But who would believe her?

She put her hands over her eyes and rocked gently to and fro. The young men who disappeared were usually in the first year of their marriage. Whatever the process of rejuvenation among the strains of the pseudo-genes, it must involve close association with another strain—as in the case of conjugation among the protozoa. That was how the pseudo-genes had to spread infection; through the formation of the gametes and their subsequent fertilization, a mixing of strains.

Drake had been on Hawkin's Planet. He knew too much about

Hawkinsites not to have been there at least once.

She could feel her thoughts slowly disconnect. They would be coming to her. They would be saying, *Where is Harg Tholan? And she would answer, With my husband.* Only they would say, *Where is your husband?* because he would be gone, too.

She knew that, anyway. He needed her no longer. He would never return. They would never find him, because he would be out in space. She would report them both, Drake Smollett and Harg Tholan, to the Missing Persons Bureau.

She wanted to weep, but couldn't. She was dry-eyed and it was very painful.

And then she began to giggle. She couldn't stop; it just went on.

After all, it was very funny. She had looked for the answers to so many questions and had found them all. She had even found the answer to the question she thought had no bearing on the subject.

She had finally learned why Drake had married her.

Not a conjugal relationship—
Conjugation.

—ISAAC ASIMOV

• BIG NEWS NEXT MONTH . . .

DON'T LIVE IN THE PAST by Damon Knight

A novelet of a disturbingly possible future, based on an all too genuine past! With, of course, the famous light Knight touch. . .

Man of Destiny

By JOHN CHRISTOPHER

Illustrated by PETER BURCHARD

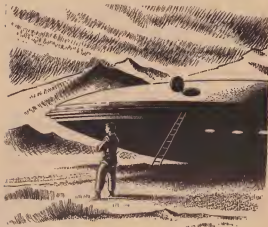
A newly discovered planet is a setup
for a sharp go-getter who knows what
he is after. That is, it should be!



THEY clock the spaceships in from the main control tower seventeen miles southeast of Tycho. The magnesium flares blossom out against the stars and the searching telescopes find them and name them. The *Elitira* back from Procyon, the *Alie Wien* from Llimen III, the *Winston* from Sirius. Ships laden with passengers and freight from halfway across the visible universe, controlled corks

bobbing up through the maelstrom of time and space to that same narrow arc of the lunar sky. They come in on time—solar time. There's no danger to life or goods or schedule.

It wasn't always so. When the slip process was first being developed, there were both danger and uncertainty for those isolated men, strapped in their bubbles of metal and plastic, who voyaged out across



an alien dimension to the far reaches of the sky. Their job was to take routine star pictures and then come back on the reverse. But the reverse did not always work. They were stranded then, hundreds or thousands of light-years from the planet they had known as home.

From the moment the reverse failed, Theodore Pike concentrated on the lucky side of his situation. He might have been lost in the remotenesses of interstellar space, condemned to suffocation when his meager oxygen supply gave out—a week of waiting for death unless he had the courage to seek it out first.

As it was, he was slap in the middle of a solar system, a matter of three hundred million miles from a blue giant. The system, as he had planned it for the report that would not now be made, was not of any notable size. There were only three planets. One was very large and impossibly distant from the sun. But there was some hope in the other two. In size they were reasonable enough. He arrowed down toward the first of them three days later; and at once set the coracle climbing up again, through a methane atmosphere, from a barren and unrewarding surface.

That left one planet. Only one.

When he released the hood and the planet's air came in, it was like the first time he had tasted wine, in the late spring at Heidelberg,

under the gaudy cherry blossoms. He lifted his body clear and slid down the still warm metal of the spheroid to the mossy ground. The moss was dark green, and deep and springy. His feet went down two or three inches, but there was resilience even beneath that.

He looked up at the sky. It had a strange and strangely warm green tinge; the sun was hidden behind tufted blue-green clouds. He looked toward where it should be with contemptuous, good-humored acknowledgment. It had done its job; he was all right now. Then he stood easily erect beside the spheroid, watching the natives hesitantly approaching from the village fifty yards away.

They were humanoid bipeds, with a natural green-tinged fur, but wearing artificial decorations and the beginnings of clothing. He stood quite still as they approached. Ten yards away, with a slow and somehow graceful ceremony, they all knelt. They rested their heads on the green moss. When he spoke, they looked up. He beckoned and they came closer. Their leader knelt again at his feet. Quite casually Theo put one foot on the prostrate head.

It was accomplished. The natives had found their god.

THE first few months passed very quickly. He had set himself one task—to learn the language. After that, the life of Beilly.

Things were already very pleasant. The food made of something like swansdown, the spiced and delicate foods, the sweet yellow wine which, by a dispensation of Providence, had a far less intoxicating effect on him than on the natives. They got drunk on it; a cheerful, happy drunk every seventh or eighth day. He was able to preside over their revels benignly enough, mellowed and happy enough himself in—as he reflected sardonically—his divine way.

He had been figuring on a week of seven days and only later discovered that the natives had a ten month year. The four months thus far had been rather less than one of them, but at the end of that time he could communicate well enough.

He called the chief, Pernar, into the hut that he had once owned and gave the preliminary directions for the building of his palace. The natives already had fire, but had not applied it to the working of metals. He gave them that, and the spoked wheel. They were enough to be going on with, in addition to the supreme, never-ending boon of his own personal godhead. He had found an outcrop of good granite, tinged with rosy green in the prevailing light of the planet, less than three miles from the village.

The palacet went up fast. He took it over with due ceremony. The natives were puzzled but respectful.

That was where the settling down began. At one time, at the

beginning, he had held vague hopes of being rescued through the slip. He had even planned great beacon towers spaced across the planet. But more sober reflection proved them futile. Even with every imaginable success, the Mendola process could not be studding the universe with ships enough to make the possibility of this planet's discovery more than fantastically remote. This was a life sentence.

He had something bigger to do now. He would leave something for the exploring slip-ships to find: a civilization founded on a manifest divinity. At its heart a shrine, and in its shrine the memory of what Theodore Pike had made of his exile.

In the eighth month of the planet's year, he provided the steam engine.

THE natives stood around with their usual impeccable gravity; Pernar surrounded by his men, and even the bolder of the women and children. The tiny model hissed; the small piston began to work the wheel.

"In this, my people, is your future," Theo told them. "With this your labor will be lightened, your fields made fruitful. Your ships and wagons will cross the wide spaces of the world. All this your lord brings to his people."

They nodded solemnly and bowed. The sun was at its zenith, where its light concentrated into an

astonishing blueness. Every day at this time the green became blue for an hour; by now, an ordinary miracle. He looked over their heads toward the dazzling sapphire of his palace. At its threshold stood the two gigantic replicas of his own image. The small white jet of steam climbed unwaveringly. Eventually there would have to be a larger palace, he reflected. But still here, in this spot, still enshrining the spheroid and the spot where it had landed.

Who would be in it? he wondered to himself. He had thought of it before; it was his most sustaining fantasy. The great slip-ship settling down into this blue-green world, being taken (as the tradition would demand) to the shrine of the great palace-temple, looking with astonishment—and respect? pride?—on the first interstellar coracle, the tomb of Theodore Pike. What would the visitors be like? They would be respectful, anyway. They would be proud of the memory of the first of their line. His name would leap through the vast gulfs that now cut him off from all his youth might have enjoyed. That made up for everything.

But everything was quite a lot.

FOLLOWING Theo's demonstration, the natives seemed in no hurry to adopt the steam engine. Every now and then the elders would come to watch the little model puffing away. Theo explained

it to them several times, and they nodded their heads in respectful approval. But all their working time now was being devoted to the harvest. The whole tribe—men, women, children—toiled in the fields through the long hot days.

Even in his natural indolence he was aware of a sense of urgency about their labor; they worked on their holiday now, only getting drunk when the green twilight had darkened into night. He had the shrewd sense not to interfere. A natural rhythm of the tribe, he guessed, best modified by the fundamental change in environment which his technology would inevitably create.

He went out into the fields one day to watch them. Pernar, the chief, was sweating with the rest. Theo lay back in the springy moss and watched them. He noticed idly that the wagons carrying produce—mounted now on his wheels, the old crude wooden skids having been discarded—did not go back to the village, but away up the slope, in the opposite direction. He asked Pernar why.

Pernar explained, "Against the Time, Lord."

"The time?"

Pernar paused for a moment, fumbling. At last he used a word Theo had not heard before.

"What's that?"

Pernar said awkwardly, "The wild air . . . the water."

A rainy season! Theo under-

stood. It was reasonable enough that the harvest had to be in before the rains came. But that didn't explain the wagons trekking away uphill. He asked Pernar again.

"At the Time, we retreat. It is necessary."

"Necessary" was a common and useful word in the vocabulary of the natives; it stood for anything they were in the habit of doing. Eventually he would do something about it himself. But now it was pleasant enough to lie back in the green moss and watch his people going about their business. Let this coming rainy season pass in the usual way; next year he would really get down to pouring them into his mold—into the necessary mold for the empire that he would build and leave as his record to those shapes a thousand years in the future.

THE sky thickened into cloud over a period of several days; from thin twists and strands low on the horizon to ropes and bunched masses, and, finally, a universal, paralyzing gray. Two days after this unbroken canopy had settled over them, Pernar came to him in the palace.

"Lord, it is the Time."

Theo said, "How long will your people be gone?"

Pernar was startled. "You are not coming with us, Lord?"

"For you in your huts, the retreat may be necessary; these gran-

ite walls are protection enough against the wild air. In other years, you, too, will have refuges like this. Go in peace now."

Pernar nodded reluctantly. "Your other servants, Lord . . ."

He was referring to the personal servants who attended the god-king in his palace.

"They will be safe here," Theo said.

"They will not stay, Lord. They dare not stay."

The best argument, Theo realized, was acquiescence. When they returned to find the palace still standing beside the storm-blasted huts of the village, that would be the real conviction. He said simply, "Let food and drink be made ready. For how long?"

"Two weeks."

"Two weeks, then."

He was aware of loneliness when the last of them had gone, up the rising ground to whatever ritual refuge they used against the storms. Now once more he was conscious of his isolation, cut off from his own people by uncountable galactic miles, by the long sweep of time itself. Only the realization of destiny made the future seem worth while. He was pleased, in a way, when the rising wind began to howl about the village. The savageness of the elements gave him something to measure himself against.

But he was not prepared for the fury that developed. The storm

rose from climax to climax; rain belted down torrentially from the raging skies. On the third day it rose to hurricane force.

From an embrasure slit, he watched the pitiful native huts torn from their moorings and flung like tattered leaves about the swirling sky. It seemed impossible that there could be more violence, but more came. The air shrieked in protest, a high-pitched wail under the constant lash. Theo watched it in amazement.

He was more amazed still when Pernar came to him, drenched and battered from his voyage through the storm.

"You must come, Lord."

"Into that?" He pointed out into the storm. "You'd better stay here yourself now."

"The water . . . the water that rises."

"Floods? This place is high enough. We're all right here."

"You must come, Lord."

The argument between them went on as the late afternoon passed into night. And with nightfall, astonishingly, the rain stopped and the gale dropped. Theo said to Pernar triumphantly, "You see?"

For answer Pernar insisted on dragging him outside into the open. The ground was soggy underfoot; the mashed remains of the huts lay before them. Pernar pointed. On the far horizon a glow became increasingly brilliant against the thinning clouds. The cloud strands

twisted and broke, and, in the interval of clear sky, he saw it.

A moon. A giant, gibbous moon poised above the skyline like a grinning skull.

But how? He knew this planet had no satellite.

When he considered things, it was obvious enough. One of the other two planets in the system, almost certainly the nearer one, with the methane atmosphere, was eccentrically orbited. It was this the natives measured their year by—the regular approach and the attendant perturbations. All their life, inevitably, must be regulated by it.

Pernar said, "The rising water, Lord . . ."

He understood that, too. With one last glance at his sand-castle palace, he said, "Let's go."

THE refuge was under the rocky knob of the hill's carapace, a natural cave hollowed out and improved by the work of generations. They arrived there with less than an hour to spare. Theo watched, with Pernar and the others, the brilliant globe that put out the light of the usual stars in a sky now clear and unclouded again. And he watched the tidal wave surge like a moving mountain of water to within twenty feet of where they crouched.

Watching it lap the land, almost at their feet, he considered the kind of courage that could have made Pernar go down into that doomed

valley to rescue him. Nor was it any easily dismissed compulsion of religion. He had been fooling himself about that. You did not rescue a god from the consequences of his folly.

They were a peaceable and docile people. They had accepted his commands and they had given him service; if he wanted to be a god, they were willing to let him. But they weren't his subjects or his disciples. More important than those things, they were his friends.

There was still much he could give them, but more, he suspected, that they would give him.

Finding himself not a god was a relief, somehow. It was less of a strain to be human and fallible.

THE floods receded, and the tribe moved again into the valley. As the great blue sun burned the water out of the steaming soil, they set to work to plant the seeds again and to rebuild the vanished huts.

They worked with them. He found an unexpected satisfaction in these labors, and an increasingly deeper realization of the nobility of these creatures who seemed to be without even the slightest trace of mutual hostility or anger. They accepted his working with them in the fields as casually as they had previously accepted his overlordship; the difference was that now he was one of them and wanted no more than the awareness of that oneness.

Sometimes, especially when he passed the broken and scattered stone of what had been his palace, he remembered the world he had come from, and that great ship that—in a hundred years, a thousand, a hundred thousand—might drop through the green glow of the sky.

But the memory and the thought were tinged with fear. Fear of anything that might come to disrupt the beauty and peace of this undemanding life.

When the planting was over, there was the season of recreation. They danced, supple, graceful, unhurried dances, to the music of flutelike instruments; and chanted poems whose tenderness he understood more clearly as his mind grew more at home in their liquid but sinewy tongue.

Day after day, week after week. Work and rest and laughter and song. Where he had once asked for worship, he found himself almost reverent.

He had not guessed there could be such joy in humility.

When he died, twenty of the planet's years later, he had been their loved and respected chief for nearly fifteen years. Only you couldn't call it chief, nor had he done so.

They buried him in his former palace, which had gradually become a mausoleum. His last request was to have the steam engine buried with him.

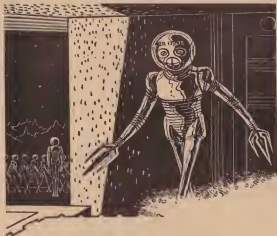
JOHN CHRISTOPHER

ASK ME ANYTHING

By DAMON KNIGHT



Illustrated by EMSH



He had only to ask and all the knowledge of the universe would be his. But first he had to know what the questions were!

IT BEGAN with the crutch. Then came the iron hook, then the first mechanical limbs. And finally—

Bedlam. Thin metal legs switching by, a moving forest of scissors. Metal arms flashing in balance;

toes of metal, like bright dented beetles. Round metal skulls that cupped the swift wink and unmoving stare of human eyes.

Krisch, watching them in his desk scanner, kept the volume turned down. The unit walls were

deliberately made sound-reflecting; the children grew up in the atmosphere of their own clattering noise, and they learned to shoot against it. To soldiers so reared, there would be no terror in the roar of battle. But Krisch, who was only human, wore earplugs when he walked among them.

The river of metal funneled into classrooms, stopped. Lights flashed on over the scanners, on the board that covered the twenty-foot wall facing Krisch's desk. Instruction had begun.

Krisch watched the board for a while, then switched on the illuminated panel that carried his notes, and began to dictate his weekly report. He was a small, spare man, with thinning strands of iron-gray hair reached stiffly back over his freckled brown scalp. His mouth was straight, and the lines around it showed that he never smiled; but there was a glint of controlled, ironic humor in his watchful eyes.

A bell spoke and a red light gleamed. Krisch looked up sharply, identified the scanner under the warning light, and transferred its image to his own desk screen. Half a thousand pairs of eyes stared back at him from the massed metal forms in the amphitheater.

Krisch set the playback cube for one minute preceding. The robot instructors were equipped to answer all permissible questions; therefore, a non-permissible question had just been asked.

The harsh voice of the robot said, "—along the inguinal canal and enters the abdomen through the internal abdominal ring. Yes? What is your question?"

There was a pause. Krisch scanned the rows of gleaming heads, could not tell which one had signaled "Question." Then the abnormally loud but still childish voice spoke, and simultaneously the student's number appeared in the recording circle at the lower left corner of the screen. Krisch started it automatically. The ten-year-old voice bellowed:

"What is a kiss?"

THERE was a five-second pause. The robot answered, "Your question is meaningless. It has been reported to the Director and you will hold yourself in readiness for his orders." Then it resumed its lecture.

Krisch switched the scanner back to normal operation. The robot was now discussing the prostate gland. Krisch waited until it had reached the end of a sentence and then pressed the "Attention" button on his console. He said, "Cadet ER-17233 will report to the Director's Office immediately." He cleared the board and sank back in his cushioned chair, frowning.

A non-permissible question was bad enough in itself; there had not been one in the oldest class in the last six years of the Project's existence. It was not only bad; it was

indefensible. Logically, it should not have happened—the entire student body of the unit, according to a check made not a week ago, was correctly conditioned.

But that was not all. The robot instructor had been perfectly truthful, to the extent of its own knowledge, when it had said the cadet's question was meaningless. The subject of normal human love relationships was not on the curriculum for two more years. To introduce it earlier, with the desired effect of repugnance, would seriously damage discipline.

Krisch turned his selector to the appropriate list, but he knew the answer already. The word "kiss" was not in the student's vocabulary. And there was no one in the Unit, besides himself, from whom the cadet could have learned it.

Krisch stood up and went to the transparent wall behind his desk—one huge window that looked out on the parade ground and beyond it to the dull, airless surface of the planet. Only starlight gleamed from the jagged points of that landscape which faced eternally away from the sun; the force screen that maintained the Unit's atmosphere also acted as a light trap.

He could look up and see, one thousand light-years away, the cold dim glow that was the cluster of which Cynara was a part, and the whole frightening majesty of space in between. But a hypothetical enemy scout, pausing in space to

scan this waste planet, would see nothing but a tiny disk of blackness that might be a vitreous plain, or the crater of a long-dead volcano.

KRISCH had been here a little more than ten years, moving along from one installation to the next with his class, turning over the vacated office and its duties to the next lowest man in the hierarchy. Each year, a new Director was shipped out with a new load of embryos and equipment, and at the end of ten more years, Krisch would be permanently installed as director of the final Unit, and as senior officer of the entire Project. That was all he had to look forward to, for the rest of his life. Many ships arrived here, but none left, or would ever leave, except those that carried the troops themselves when they were needed. Krisch's rewards were solitude, achievement, power, and the partial satisfaction of a boundless curiosity.

His penalty, if the Project were to fail or even be seriously delayed while it was under his command, would be painful and humiliating. He would not even be allowed to die.

The door speaker said, "Cadet ER-17233 reporting as ordered, sir."

Krisch returned to his desk. He said, "Enter."

The metal thing stalked into the

room and stood at attention in front of the Director's desk. Only the absolute minimum of it was organic: the boy's head, pared to a functional ball, the blue eyes staring through the metal skull-piece, a surgically simplified torso, the limb stumps. By itself, it would be no more than an unpleasant, useless lump of meat; but, housed in the metal body, it was a sketch of the perfect fighting man.

The cadet, like the rest of his class, was only ten years old. Raised from an embryo in a plastic sack, the living part of him had been transferred many times from one articulated metal shell to another. For that reason, his present body was comparatively crude. When he reached his full growth, he would be given his final body—so fantastically armored as to be almost indestructible, so powerful that it could outrun any land vehicle over broken terrain. The weapons built into his arms, controlled directly by his nerves, would be sufficient to destroy a city.

And he would be completely without fear.

Krisch let the silence frown between them while the boy stood at attention. Just now, the boy knew tension. It was necessary for discipline, and the repressed hostility toward Krisch would later be translated into a useful hatred for all non-mechanical human beings. To use physical pain as a means of punishment was out of the ques-

tion, a total impossibility. That, in fact, was the root idea of the entire Project.

THE crutch went back to prehistoric times. The metal hook, to replace a lost hand, was born early in the Iron Age. The Twentieth Century knew prosthetic devices which looked almost like flesh, and adequately performed all mechanical functions of natural limbs. But it remained for the galactic culture and the warlike nation which Krisch was a part of to discover that artificial limbs could be more than a lesser evil; that the metal arm, the metal finger, was better than flesh. Better. Its cleverly articulated segments reported pressure, temperature and position at least as well as flesh. Its strength was incomparably greater. And it felt no pain.

Man is so soft, thought Krisch, in comparison with the metal he uses; so soft, and so easily hurt. Every cubic inch of flesh, excepting only the brain itself, contains its minuscule fuse of agony. But metal feels no pain. Those boys will conquer the galaxy; no human troops can stand against them.

He amended the thought. Five minutes ago that had been almost a certainty. Now it was only possible.

He said, "Where did you learn the word 'kiss'?"

The boy's eyelids fluttered behind the steel mask. "From a—"

He hesitated. "A training device, sir," he finished uncertainly.

Krisch said sharply, "Are you sure?"

A long pause. "I—I think that's what it was, sir."

"You *think* it was," said Krisch. "Describe this 'training device.'"

"It's like a human being, sir."

"Mechanized, or all flesh?"

Silence. The boy's eyelids blinked, and Krisch could imagine the rest of the face, screwed up in an agony of indecision.

"Answer the question," Krisch ordered.

"Neither one, sir," said the boy painfully. "It was—"

"Well? What was it made of?"

"Of—"

"Well?"

"Of—just lines, sir."

KRISCH sat back a moment, looking at the cadet in frowning silence. The boy's hesitant answers showed either that he was lying, which was inconceivable, or that he was conscious of guilt.

"Of just lines," he repeated. He put a skeptical note into his voice. "Explain."

"That's all, sir," the boy said in a rush. "It was made of lines, and it looked like a human being, and it talked to me." His voice stopped abruptly.

Krisch pounced on that. "What did it talk about?"

"About—about love, sir."

Another word the cadets had not

been taught. "Go on," said Krisch. "What did it say about love?"

"About one human being loving another one. It said that means when you know the other human being is lonely and unhappy like you, and you give the other one part of the way you feel about yourself, instead of keeping it all. And you show how you feel by meeting flesh to flesh, and it makes you feel wonderful, like killing something, but much better." The cadet paused. "But I didn't understand about kisses. It seemed to be very complicated."

Krisch felt a ball of coldness settle in his chest. This boy was ruined; he would have to be scrapped. And how many others—?

"Where did all this take place?" he demanded.

"During airless maneuvers yesterday, sir."

Krisch tried to visualize it: the cadets scattered out there in the cold blackness, carrying out one of the prescribed war games under the direction of student squad leaders. One of them isolated from the rest, waiting for a signal. And while he waited, *something* had approached him, and spoken to him of love. . .

"No one else saw or heard?"

"No, sir."

"Why did you fail to report it?"

A pause. "I thought it was part of the training."

"Tell the truth!" Krisch snapped.

The cadet's eyes blinked. As Krisch watched, horrified, they

grew unmistakably moist. "I don't know, sir! I don't know!"

The moisture brimmed over. Two tears ran down the shining mask that was the boy's face.

Another signal light blinked red on the master board, then another. Krisch knew, finally, that the test had come ten years ahead of time.

The Project was at war.

KRISCH strapped himself into the speedster and eased it out through the exit tunnel. He had put the entire student body through interrogation and a psych check, and had turned up fifty-three more cases of induced aberration. For the time being, he had left them all at liberty but carefully monitored; he hoped that one of them might be approached again by the saboteur, whoever or whatever it was.

Something flashed dully in the starlight outside the transparent nose of the speedster. Krisch stared at it, then inched the speedster over until the object lay almost directly under him.

It was a cadet, without the space-gear that should have closed the openings in his face-plate and made his body airtight. The body was sprawled lifelessly. The staring eyes were blood-red with burst capillaries.

Krisch peered through the transparent metal and read the serial number etched into the cadet's steel forehead. It was the boy he had interviewed an hour ago.

He contacted his desk relays and gave orders for the disposal of the body and the detention of the other fifty-three. For the moment, it was all he could do.

He took the speedster up and set its course toward Unit One, three hundred miles away. After his interview with Cadet ER-17235, he had called the Directors of the other nine installations and ordered immediate psych checks. The results, gathered two hours later, showed that every unit had been affected. Yiar, Director of Unit One and the newest member of the Project's staff, had had an additional and equally disturbing report to make.

Krisch watched the backdrop of white fire and black velvet move ponderously past. Even if he were able to remove the disturbing factor before it had done further harm, it might prove impossible to knit the Project's structure together again. The oldest of the cadets had not yet reached the stage in which the circle of their conditioning would be unbreakable. Normal emotions and a normal biological life had no place in that circle, but it was still possible to introduce them. The result was—insanity, a flood of emotion for which no outlet had been or could be provided; impossible desires; the classic insoluble dilemma.

He remembered the blood-red, staring eyes of the dead boy. The symbolism was appropriate. His

eyes were the only organs of expression left to him, and he had certainly used them effectively enough.

FOR the first time in many years, the Director wished he had not been born into a nation with a history of thwarted development and a psychology of resentment. He wished that he were an underpaid pedagogue on a world at peace. He wished that he had not been forced by circumstances to put that boy in a metal cage.

Viar met him, by request, at the bottom level of Unit One, the level that housed the huge atomic converter which powered the unit. Viar was a youngish man with a large, white, perspiring face that expressed conscientiousness and insecurity. His eyes were milk-blue surrounded by white lashes. Krisch disliked him thoroughly.

They stood by the shaft that the converter had dug in the stone of the planet. Viar said nervously, "I first noticed that we had stumbled on something when I checked the meter readings. They showed mostly granite, but there were occasional fluctuations that indicated refined metal. I was curious, so I set the converter to extract only the stone. Yesterday I shut off the converter briefly, and sent a cadet down to see what was left."

Krisch looked at the curious array of objects spread out on the plastic floor. There were three

metal tablets incised with neat rows of dots, ovals, squares, and crosses. There was a long curved trough, with an attachment at one end that suggested it might have been designed to fit a wrist—or a tentacle. There was a set of concentric ellipses, with little balls that seemed designed to run along them; clearly an orrery of this solar system. There was a six-foot metal box, curiously fashioned in a complexity of intersecting planes.

Krisch knew that this world could not have supported indigenous life more recently than ten million years ago; but there was not a trace of corrosion in any of the artifacts.

He said, "Why did you fail to report this until I called you?"

Viar said apologetically, "I thought it could wait for my weekly report. It didn't seem to have any importance, until today. Then I noticed that this box was open."

Krisch looked at it. The seam gaped very slightly around three sides. He tested it, and found that the enclosed face would not move in either direction. It seemed unlikely that anything but a gas could have escaped.

HE REMEMBERED the dead cadet's description of the strange thing that had spoken to him on the training ground. "It was made of line . . ." None of the others had duplicated this phrase; they had simply said that

it was like a man, but different. The fanciful thought occurred to him that if the first description was correct, and the word "lines" had been used mathematically, even this millimeter gap would not have been necessary.

"Is it possible that one of the cadets could have opened it?" he demanded.

"Perhaps," Viar granted, willing to consider every possibility, "but it does not seem probable." He gestured toward the box. "I made several attempts to open it when I first got it out. Perhaps something I did had a delayed action. At any rate, I would swear that not only was it heavier then than it is now, but that there was a force-lock of some nature holding it shut. I've looked in with a microprobe, and there is a small mechanism of some kind attached to one corner. I believe the box can be opened fully now, but I thought I had better wait until you could inspect it."

"You believe, then," said Krisch, "that there was a device in this thing which was still in operation until yesterday?"

Viar looked at him with a trace of hangdog defiance. "I believe that there was something in that box which is still operating now."

Krisch controlled his irritation and said nothing. As Viar escorted him back to the exit tube, Krisch told him, "Proceed with normal activities, but monitor every cadet. Open that box, but not inside the

Unit. And report to me hourly." He strapped himself into the speedster again and turned its nose back to Unit Ten.

THREE more cases of aberrant conduct were waiting for him, and the reports from the other units were similar and equally alarming. Krisch interviewed a few more, then cubed a standard interview form and turned the process over to robot mechanisms. Viar called him later in the day, to report that he had succeeded in opening the box, but could make nothing of its contents.

Krisch got the collated reports from the robot interviewers, and ran up a tentative prediction. In twenty-six hours, the unknown agent—which might or might not have escaped from the box unearthed by Viar—had corrupted one hundred and fifty-three cadets, or approximately one every ten minutes. If it continued at the same rate, which, of course, could not be assumed with so little data, ten per cent of the total student body would have been aberrated at the end of three hundred hours. Twelve and a half Galactic Standard days. At the end of that time, Krisch reckoned grimly, the Project would be hopelessly crippled.

Monitoring the cadets had been totally ineffective; Krisch ordered it discontinued. His only other defensive move would have been to suspend normal activities altogether

and keep the cadets in monitored groups, but that would have had a psychological effect nearly as bad as the one he was trying to avert. He ordered the absences to be confined and then destroyed personally by the Director of each Unit, without the knowledge of the student leaders.

He carried out this duty himself in Unit Ten, and then went to bed.

HE AWOKE from a nightmare in which he had been surrounded by silent metal bodies—the bodies of ten-year-old cadets; but instead of the egg-shaped head-pieces, they had worn open helmets, and where their faces should have been were raw, bleeding disks of flesh.

Deliberately he relaxed his body and sank back onto the sweat-drenched cushion. Then he sat up again with a start, realizing that what had waked him had been someone's entrance into the room.

Add that was simply, stackly impossible. His apartment was guarded while he slept by armored walls and a massive door which would have held back a division. Moreover, there were alarm devices which would signal any attempt to enter. Still further, no one in this Unit or any other had the slightest sane motive for trying to enter without permission.

That realization exploded in his mind and faded against the fact

registered by the outmost corner of his vision: *There was someone in the room.*

He raised his head, looking full at the archway that separated his sleeping room from his office. He saw a dim glow from the instrument panels.

A strange man stood there,

That was his first dominant impression; and it was so strong that for a long minute, even while he saw that he was mistaken, he could not rid himself of it.

The eye does not see a man; it sees a grouping of lines which are capable of almost infinite variation. The visual center interprets those lines, compares them with a *gestalt*, a perception-of-form, and the mind says, "Man."

With an effort, Krisch put aside his preconceptions and accepted what he saw.

He saw a collection of lines that enclosed no form. The glow from his office shone between them. There was a series of curlicues that might have suggested hair, then a gap, then two incomplete spirals that vaguely suggested eyes; another gap and a straight line for a nose; farther down, a line for the mouth, curved into an idiotic smile. On either side was a handle-shaped line for the ear.

The body was like that of a stick man drawn by a child; one line for the torso, two for the arms, two for the legs, and three wiffy curling lines for each hand.

The figure said, "Ask me anything."

The voice spoke without sound, the words coming spontaneously into Krisch's mind, as if written with a phosphorescent crayon on a sheet of black glass. Krisch realized this without surprise, and briefly wondered why. Then he recalled the interview with the first cadet. The boy had said he had spoken with the "training device" outside the Unit area, during airless maneuvers.

Krisch thought, "Who are you?"

The answer was immediate. "I am a device to entertain and instruct you. Ask me anything."

Krisch's hand rested on the button that controlled a battery of force-pencils focused on the area in front of his couch, but he had no intention of using it. There was every reason to suspect that such methods would fail; and, if they did, he would have surrendered his only chance.

He decided to take the thing at its word. "How can you be destroyed?"

"I cannot be destroyed."

"How can you be immobilized, then?"

"By—" The figure went on without a pause, but visual images replaced the words. There were, Krisch realized, no words in his language for those images. They flashed briefly before him, each one trailing glimpses of the process that produced it. Krisch could not

even retain the sequence, much less interpret it.

"Repeat," he thought.

The same images came and went. At the end of it, Krisch knew that he would never learn anything useful from them. What he was seeing was the terminal end of a thousand-year chain of technology. He could not expect to grasp it from one simple explanation, any more than a savage could be taught metallurgy in a single lecture.

Krisch remembered, with panic, that the thing's average indoctrination period was ten minutes. He said, "What governs the length of time you stay with one person?"

"If he asks me to stay, I stay."

KRISCH relaxed for the first time since he had seen the figure standing there in the doorway. If that was true, then his battle was won.

"There are a great many questions I want to ask you," he thought. "Stay with me until I ask you to go."

There was no reply.

He demanded, "Will you do as I ask?"

"Yes."

Fully awake now, Krisch raised the back rest of the cushion and pressed the buttons for nourishment. His mind was racing. A thought was half-born in his mind that made him tremble. He asked, "Of what substance are you composed?"

The figure said, "Of no substance. I am the Pattern."

Krisch leaned forward. "Do you mean that you are not material?"

"I am not material. I am a pattern of forces which adapts itself to each individual I serve. You see the sketch of a man. My makers would see something quite different."

"Are you intelligent?"

"I am not intelligent. I have no will or independent existence. I am merely a device for answering questions."

Krisch thought for a moment. He said, "A minute ago you described yourself as *the* Pattern. Does that mean you are the only one of your kind ever created?"

"No. There were many others, but the race that came after my makers did not like us. We disturbed them. Therefore they imprisoned us, like the *jinns* in your legend, since they could not destroy us."

Krisch asked, "Are you capable of lying?"

"No."

That was the central question, and unfortunately the answer meant nothing. But Krisch was beginning to see a strong possibility that his first estimate of the thing as a saboteur was mistaken. The other explanation fitted the facts more readily and completely. The Pattern was what it called itself, "a device to entertain and instruct you." It presented itself to a cadet who was

alone and idle—probably it had been designed never to interfere with anyone who had something better to do. The cadet asked questions; the Pattern answered them. At the end of ten minutes or so, for a cadet was rarely unoccupied for longer, the cadet released it and it looked for another client.

And because the fields about which the cadets were most curious were precisely those whose knowledge would destroy them—they went insane.

THE Pattern had said "the race that came after my makers did not like us." It was understandable. Every culture had its areas of forbidden knowledge and politely ignored facts. The Pattern would be inhibited in those areas, where its own makers were concerned. But in an alien society, its truthful answers could be explosive.

Krisch asked, "Were you intended for the use of children, or of adults?"

"For the use of both."

The knowledge he wanted was there, then, and by asking enough questions, he could get it. You could not teach metallurgy to a savage in one lecture, or even in one day—but you could teach him.

Assuming that the Pattern was truthful, there was still one open question that gave Krisch reason to hesitate. An absolutely truthful oracle could be a dangerous thing: witness the insanity of the cadets,

and the "disturbance" of "the race that came after our makers." Krusch's mind was not the artificial, delicately balanced creation that the cadets' were, but he knew very well that he had areas of instability; he could even concede that there might be such areas of which he was not aware. Could he ask the right questions—the ones which would not evoke dangerous answers?

He thought so. What he wanted from the Pattern was nothing that could be intimately bound up with his emotional drives or the structure of his ego; he wanted technical information.

Prove to a religious fanatic that there is no God, and you destroy him. But give him a flamethrower, and he will destroy the ungodly.



Finally, there was the question that capped all others: just how had the Pattern kept up an average rate of one cadet every ten minutes, counting the time spent in traveling from one Unit to the next, and in finding an available subject?

The answer was the one Krisch had suspected and hoped for. The Pattern moved by instantaneous transport, out of the normal fabric of space-time.

"How?" asked Krisch. Again he got a series of incomprehensible images. "Explain that first picture," said Krisch, and "Break that down further," and "What is that component?" And, very slowly, the Pattern began to teach him.

THE problem of limiting the Pattern's activities while Krisch slept bothered him. He solved it, finally, by setting up a pool of cadets to be admitted by a robot monitor, one at a time, into a room where the Pattern could talk to them without interruption. As soon as one cadet stopped asking questions, he was removed and another was admitted. Krisch found that although the Pattern could plant the seeds of insanity in a cadet in less than ten minutes, it took an average of nearly two hours to reduce the same cadet to such a mindless state that he was no longer useful as a questioner. Thus, during each of Krisch's six-hour sleep periods, the Pattern disposed of only three cadets. During the re-

maining eighteen hours of each day, Krisch kept it fully occupied.

All knowledge is power, rightfully applied. But Krisch needed a particular kind of lever, and a special place to stand. Slowly and painfully, he was getting it.

The balance of forces which had made the cadets possible and necessary included, as one of its basic assumptions, transport at finite speeds. Under this limiting condition, attack from space on a fortified planet was enormously costly and by itself could not succeed. It was necessary for the attacker to expend twenty ships in order to land one. Thereafter, the war proceeded on the ground, under the enemy's own defensive umbrella, as wars had always been fought—in hand-to-hand, street-to-street combat. Superiority in ground troops, therefore, could be the decisive factor.

But an object moving instantaneously could not, by definition, be interrupted or affected in any way while in transit. And therefore the man who brought the secret of such transport to Cynara or any other great power could ask his own price. Since the power which bought the secret would shortly rule the galaxy, the price would be high.

If Krisch had been required to understand everything he was taught, the project would have been nearly hopeless. As it was, his task was difficult enough. The Pattern's

knowledge included minutely detailed plans for every stage of the operation that was required, and for all the subsidiary operations that produced the components, and the still more subsidiary operations that produced *them*.

KRISCH had to follow these step by painful step, like a savage smelting ore to build a smeltery to smelt the ore better, to build a foundry to cast the metal to make tools that made other tools that built a machine that built another machine to draw wire, that another machine shaped and threaded. Result, a bolt.

He stopped sending his weekly reports. The next ship to Cynara was not due for six months, and it would take more than two years for a ship to reach him after his message carriers stopped arriving. He glanced at the master board in his office only twice a day, when he awoke and before he went to bed. The rest of the time he spent with the Pattern in the Unit's machine shops and laboratories.

Minor breakdowns occurred, but he grudged the time to attend to them. Repair machines broke down and were not replaced from stock; thereafter, when anything went wrong with a robot instructor or monitor, it remained out of action. Cadets went to their assigned classrooms, but heard no lectures. Krisch saw a few of these, with more initiative than the rest, wandering

around the corridors. He ignored them. The Project simply did not matter any longer, by comparison with the weapon he was forging under the Pattern's direction.

He allowed the weekly cubes from the other nine Directors to pile up unread on his desk. On the fifteenth morning, the green light of the inter-unit communicator was blinking as he entered his office. He clicked over the switch and saw Viar's round, perspiring face on the screen.

Viar said, "Director Krisch, I've been trying to get you since eighteen hours yesterday! Is anything wrong at your Unit?"

"Nothing's wrong," said Krisch curtly. "I've been very busy. What is it you want?"

"Why, I was only wondering if you'd decided what action to take on the special report I sent you last week. I don't want to press you, but—"

"I'm considering it," Krisch said. "I'll let you know as soon as I reach a decision. Is there anything else?"

"Just one other thing. I was wondering if there had been any more trouble with the saboteur in your Unit. I haven't had any for two weeks, now, and—"

"Nor I," said Krisch. "There's nothing we can do so that score until it appears again, if it does."

He broke the contact and then sorted the message cubes on his desk until he found the

one labeled "Unit One—1/17/09—Special." He dropped it into the viewer and scanned it quickly.

Viar, it appeared, had been doing more archeological research on his own initiative. Krisch repressed a stab of irritation and read on. Viar had widened the converter's field and increased its output, using the surplus to turn out ingots for small converter units, in order to excavate a pit two hundred feet square by one hundred feet deep. The objects he had so far extracted showed clearly, he said, that two entirely distinct cultures were represented. Those that Krisch had already seen, including the enigmatic box, belonged to the later culture, and these included several artifacts which Viar considered to be weapons. Krisch frowned over this section; it was not elaborated.

Viar's main point was that, judging by pictograms and items shaped to the wearers' use, the first culture had been so alien biologically and sociologically as to be almost incomprehensible—but the latecomers had been men. Viar suggested, with a breathless tone showing through his careful phrases, that this was a discovery of enormous importance to galactic archeology and anthropology. Radioactive tests confirmed their previous estimate that the planet had been dead for more than ten million years.

Therefore, the conclusion was inescapable that mankind had not

originated on Earth of Sol—that there had been a previous wave of colonization, so ancient that no trace of it had ever been found before.

Viar, Krisch thought contemptuously, envisioned a future of academic glory. He wanted Krisch to authorize him to dispatch his finds immediately to Cynara, with the recommendation that a research group be set up on the Project planet, to be headed, no doubt, by Viar himself.

The notion of independent evolution did even seem to have occurred to him.

The obvious thing to do was to keep him contented, and Krisch was inclined to doubt that Viar's discoveries had any importance compared with his own. However, the thought of Viar's cryptic reference to weapons returned to him. There were two remote but unpleasant possibilities there: one, that Viar might be hinting that if Krisch opposed him, he had force to back up his requests; the other, that among those weapons, just possibly, might be one whose strategic importance to Cynara would overshadow Krisch's.

IT WOULD be just as well to take care of both, and satisfy Viar at the same time, if it could be done. Krisch thought for a moment, then dictated a memo:

"Your suggestion is accepted. Send all artifacts and relevant data

to this office for shipment. I will endorse your request for the establishment of a research group and will recommend your appointment as its head. In the meantime, however, I cannot authorize any further use of the Unit One converter for excavation purposes. Discontinue such activity, and use converter ingots pending a reply from Cynara."

That tied it up. It was not only reasonable but accommodating; Viar could not disobey instructions without open hostility. If he did disobey, he could be dealt with. If he didn't, Krisch could end any possibility of future trouble by removing all weapons from the shipment.

There was, however, a third alternative which Krisch had not taken into account, as he discovered when he examined the crates Viar sent. They contained a considerable number and variety of artifacts, but not one of them, as far as Krisch could tell, could possibly be classed as a weapon.

It did not ring true, somehow. Viar was simply not the type to make even so definite a stand as this against a person in authority over him. He would intrigue, and he would undermine, but he would never risk his neck in open conflict. A new weapon would give him some false courage, but not, Krisch thought, that much.

A thought struck him. He said to the Pattern, "Did you show

yourself to Viar before you came to me?"

"Yes."

"Why didn't you tell me?" Krisch gestured impatiently. "Never mind; I know—I didn't ask you. How long did you spend and what did you discuss with him?"

"An hour and twenty minutes. I answered his questions about myself, about himself, about those who came after my makers, and about their weapons. I told him where to look for three that were in the area he was excavating."

That was like Viar, at least, Krisch thought wryly, to get his hands on a fountainhead of power and then let go.

And Viar's sudden aggressiveness was explained. He had been shown a path to power, and the Pattern had no doubt told him a few truths about his timidity and lack of drive. Viar was, for the time being, a reformed character—and an unstable one.

THE crisis was unwelcome, since it came at a time when Krisch was almost at the end of his strenuous labors; but he was realistic enough to see that it had to be dealt with immediately. He considered his problem, made his preparations—which took some time, since they included transferring all big shop and laboratory equipment to the end of a half-mile tunnel dug outward from the Unit's perimeter—and then called Viar.

Viar's face was arranged in an expression of careful deference, through which cunning and self-complacency were almost obscenely visible.

Krisch cut through his greeting with, "Viar, your instructions were to send all the artifacts to me. Where are the weapons you mentioned in your report?"

Viar's features realigned themselves to produce an effect of utter surprise. "Why, everything's there," he said. "I sent it all over, just as you stipulated."

"Viar," said Krisch coldly, "you unspeakable worm, guilt is written all over your face. What do you hope to gain by lying?"

Viar's white eyelashes blinked, and his weak mouth hardened slightly, but he replied in the same careful, polite tone. "Perhaps something was left out by error, Director Krisch. Let me suggest this—send me back the items I gave you, and I'll make a careful search before I dispatch the shipment to Cynara."

"You mean," Krisch said, "that I had better do as you say, or I'll get the weapons, but not in the way I expect."

Viar's eyes gleamed. "If you care to put it that way, Director."

Instantly, Krisch launched himself into a storm of abuse. He had had nine years' more experience at this form of psychological punishment than Viar, and he was a past master of the art. He called

Viar a majority of the filthy names in his vocabulary, with special emphasis on Viar's putative masculinity, and he delivered the whole tirade in a tone of scathing, furious contempt. He continued without slackening his pace or lowering his voice until he saw Viar redden, turn pale. Then, still without a pause, he accused Viar of sabotage and treason.

Viar exploded. "You talk about treason!" he shrieked. "I know what you've been up to over there. I know what's been keeping you so busy! You've got that thing that escaped from my box, and you're pumping secrets out of it, so sell to the highest bidder!"

"Suppose I am?" Krisch demanded swiftly. "What can you do about it?"

VIAR told him. He had warned the other eight Directors that Krisch was plotting against the Project. Krisch was one against nine—he'd never get away with it—and Viar himself had a beam projector that would cut through Krisch's force screen like paper...

Krisch had all the information he needed. Now he wanted just one thing more—to get Viar out from behind the protection of his own screen. He told Viar, in extremely vulgar terms, to come and try it, and added an epithet he had been holding in reserve.

Viar's moon-face went whiter than before. His eyes bulged. He

opened his mouth to speak, and Krisch, grinning with triumph, cut him off.

He had been scathing Viar for about two minutes. He checked carefully to make sure that the Pattern was being kept occupied in the interrogation room; then he got into his battle harness and strode down the corridor toward the lift.

Halfway along the corridor was a group of cadets. One of them was on the floor, his metal body contorted and writhing. As Krisch approached, the boy began to scream at the top of his lungs. Krisch winced. He glanced at the other cadets, one of whom wore a squad leader's insignia.

"Why isn't he in surgery?" Krisch snapped.

The squad leader said in a bewildered tone of voice, "Surgery doesn't work, sir. The control robot there is out of commission. What shall we do, sir?"

More of the unit's services must be cut than Krisch had realized; the victim evidently had some acute malfunctioning of his internal organs which should have been detected in the incipient stage by robot examiners.

"Kill him," said Krisch, and walked on.

The voice of the squad leader followed him. "Sir, I don't understand. Are we all going to have pain, like the lower animals?"

Krisch did not answer. He

stepped into the lift at the end of the corridor and dropped swiftly to the ground level. His speedster was waiting opposite the mouth of the exit tunnel. He climbed in, worked it through the tunnel, then pointed its nose at the sky and fed it power.

FIVE thousand feet above the Unit's force screen and some distance away from its perimeter, he leveled off and hovered, scanning the surface below at high magnification.

He waited.

There it came now; a tiny, slim shape darting straight toward the Unit from the direction of Unit One. Viar must be furious, Krisch thought. He caught the shape on the screen of his computer and snapped the controls over to "intercept."

Instantly, his craft nosed over and shot downward. He counted seconds automatically. At "three" the other speedster was nearly in the center of his forward screen. At "four" it entered the field of the force cannon Krisch had installed in the nose of his ship. He pressed the trigger and flung the ship into a steep ascent.

When he came out of the gray blackout, he saw the fragments of Viar's ship still spreading, whirling crazily under the stars. Below, an amorphous column of dust and debris was rising from the site of Unit Ten. The force screen was

down, and every structure above ground level had been destroyed.

Krisch leveled off and turned on the scanner that was tuned to his cavern at the end of the tunnel. It responded immediately, showing him a view of the machine shop, with his nearly complete assembly standing in the middle of the room. Beyond were the transparent chambers in which the Pattern worked. Krisch saw that there were still three cadets waiting in the outer of these. It was enough. After an hour, there would be no more extraneous minds to ask the Pattern questions.

Satisfied, he turned his ship toward Unit Two. It was just as well that Viar had managed to destroy Krisch's own Unit; it saved him the inconvenience of doing it himself. Neglected, the cadets had become not only distasteful, but a potential danger.

He descended cautiously on Unit Two, jockeying the ship until its discharge valve was directly over the center of the force screen. Everywhere else, the screen was proof against any attack likely to be mounted by a spaceship, including radioactive dust; but here, at the node, it was vulnerable to a man who knew exactly what to do. Krisch tripped the release and let the deadly stuff filter down.

He repeated the process at every remaining Unit, taking Viar's Unit last. He was reasonably certain that Viar had not waited to persuade

any other Director to cooperate in the attack; if he had, that Director would find nothing to attack when he got there—and no place to go when he got back.

He returned to the shambles of Unit Ten, reconnoitered carefully to make sure that no other speedster was waiting within attacking range, then descended and tunneled through the debris until he struck the end of excavation. He left the speedster, opened the airtight door, one of a series that had closed when the tunnel lost air, and walked back to the cavern.

THE incredibly complex structure which Krisch had built was not the final stage; it was only the final fabricator. The final product would be Krisch himself.

He experimented first with a tiny cylinder into which he had built an affinity device turned to a target plate at the opposite end of the chamber. He lined it up so that it would pass through the field of the Pattern's machine on its way to the target, and arranged a photoelectric cell to track it and register the exact moment when it disappeared.

He released the cylinder. It streaked across the room, into the middle of the ten-foot framework of the machine—and abruptly sprouted from the target fifty feet away.

Trembling, Krisch read the meters. There was not one micro-

second's difference between the time the cylinder had passed through the field and the time it had appeared on the target plate. To the limit of his equipment's ability to record, the passage had been instantaneous.

He examined the cylinder with sensitive instruments that had previously measured its dimensions, its weight and structure. The cylinder was unchanged, undistorted.

Krisch grinned at the Pattern. There was danger in that enigmatic structure of forces, he knew, but he had escaped it by a strategy that was perfect because it was so simple. There were a million questions he had wanted to ask the Pattern; they tingled within him like an internal itch, but he had not asked one. He had asked only for the technical information he needed to build the transport device—he had not bothered to follow up any of the curious mathematical and philosophical implications of some of the steps involved. There was no time and he saw no need.

He knew that his certainty of safety was not self-delusion; he had checked himself daily with the hypnotically given psych tests. He was sane. His self-confidence was up a few points; that was natural. His empathy rating was down about the same amount; that had never been high—if it had, he would never have been assigned to head the Project. Those were the only changes. His orientation was per-

fect. There were no signs of any incipient neuroses or psychoses, including the one he had most feared: a guilt complex centered around his destruction of the cadets.

He was able to think about that without remorse, now as ever. They had only been half-alive. They were better off in oblivion.

HE LOOKED at the finished device once more. It was a hollow framework of curious, out-of-plumb angles. Over it and around it crawled a metal vine bearing odd fruits: metal roses, each petal mathematically aligned; lozenges of transparent metal, each with a tiny, glowing heart. It looked like nothing so much as some alien being's notion of a work of art; but Krisch looked at it with awe and respect, remembering the labor each tiny part had cost him.

Inside, in the field created by those metal blossoms, matter gained a new dimension—permanently. It was not like the half-efficient overdrive used in spaceships. That was an artificial condition, which collapsed when the power was withdrawn.

Krisch had made a visual analogy to help himself understand the difference. He imagined normal space-time as a sphere of viscous fluid. A ship going into overdrive extended itself half out of that sphere, and tilted its molecules so that the rest offered less resistance to the liquid. But the Pattern's de-

vise extended the matter it affected like an accordion—open, half out of the stream; closed, all the way out.

The matter so treated was not an uneasy visitor on the threshold of this abnormal space; it was at home there. And, once treated, it could be made to move from one space to the other at will.

It was, Krisch thought, the difference between a flying fish and an amphibian.

The test cylinder, though it now partook of the properties of both spaces, was useless for transport because it lacked control. It was set to home on the target plate where it now was. If you tried to move it away, the instant you succeeded by so much as the width of a molecule, the cylinder would return through hyperspace to its former position. The result, in gross terms, was that you simply could not budge it.

It was an amazing toy, Krisch thought, and some use might later be found for it. Target plates planted in enemy cities, for example, and radiating missiles.

But the principal military use of the device was going to involve human control. The human passenger was the control. You snapped into hyperspace, you selected your target in normal space, snapped through again, and you were there. In hyperspace there was a perceptible interval, long enough to choose; in normal space there was none.

KRISCH checked his equipment once more. He had a semi-portable field generator which projected a spherical force screen around him, and a reaction motor which could be used for short-range travel. The assembly was much too bulky and awkward to be of any use in military operations, but it was a necessary safeguard. If anything went wrong, Krisch did not propose to die for want of air in interplanetary space. Also, he meant to appear somewhat dramatically to the all but impregnable fortress that housed GHQ on Cynara. A startled staff officer might conceivably turn a weapon on him before he had a chance to explain.

He considered setting a charge to destroy the Pattern's device after he had used it, and regretfully abandoned the idea. It would be good insurance against any reluctance to meet his terms, but the model itself was the only thing he had to sell. He had not drawn any plans as he worked; the plans were now in the Pattern's memory, and he had saved time by working directly from the vivid images the Pattern had given him.

Krisch turned off the power, stepped into the middle of the framework and stood with his hand on the control. There was nothing more to be done. He looked at the Pattern and thought, "Will you be here when I return?"

"Yes."

Good enough. The thing was not

alive, not intelligent, and was therefore, obviously, incapable of boredom. Its drives took it restlessly from one questioning mind to another—when there were minds available. When there were none, it would wait. It had been built on this planet; evidently, no provision had ever been made for it to leave.

It knew too much, and was intrinsically too dangerous, ever to be allowed to contact another mind. Kirsch could not destroy it, but it would be here when he returned, and he could make sure that no one else would ever come to this world.

Kirsch thought to himself, "Cynara. The spaceport outside Main Fortress." He visualized it, held the thought firmly in his mind. He turned on the power.

STUNNED, Kirsch tried to orient himself, to figure out what was the matter. He lay weightless in a gray space, somehow above and yet somehow surrounded by a frightening, tangled infinity of gray spheres and white crisscrossing lines. Everything he saw was at the same time immensely distant and so close that he could almost touch it. The array changed and shifted bewilderingly, and he tried helplessly to follow it, read some sense into its motion, until he remembered: "Cynara. The spaceport outside Main Fortress."

There it was, below him, like some incredible four-dimensioned

map, at his fingertips. He saw it clearly. He willed himself toward it, into it. But nothing happened.

Time passed, time without measure. The tiny gray figures of men and machines did not move; time was suspended, for them, at the instant Kirsch had entered the field. Kirsch realized suddenly that he was hungry. Terrified, he looked at the dial of the armaker at his waist. It was hard to read; the new dimension made vision queer and uncertain, but he made out at last that he had used more than three hours' supply. Time had not stopped for him.

He thought desperately, "The Project planet. The cavern."

Instantly, there was the cavern, the framework standing in the middle of the shop floor, and, nearby, the Pattern. An instant later, the Pattern vanished.

A voice said in his mind, "Ask me anything."

Kirsch stared at it. Was there a mocking tone in that unaccented, polite mental voice? He said hoarsely, aloud, "What went wrong?"

"Nothing went wrong."

Kirsch mastered himself sufficiently to say evenly, "I was not able to enter normal space at my destination. Why not?"

"You did not wait long enough. There is a great disparity between the time rates of this plenum and the normal one; that is why travel can be achieved at a rate which

cannot be distinguished from simultaneity by your methods. In subjective terms, the trip to Cynara will take you a long time."

"How long?" Krisch demanded. He felt helpless, fixed like a pinned specimen in the midst of this gray infinity.

"Approximately one thousand of your years."

Krisch felt his face writhe and distort into the silent shape of a scream. Blood pounded at his temples; his eyes filmed. He said, "How long back to the cavern?"

"Only one year, if you were to start immediately to concentrate on the objective. If you allow yourself to drift, as you are doing now, the distance will widen rapidly."

"But I've only got enough air for twenty hours!" Krisch shouted. "I'll die!"

THERE was no response.

Krisch pulled himself back from the borderline of hysteria. He suppressed his rage and fear and uncertainty. At least, whatever the reason, the Pattern was here to answer questions. He said, "What was your motive in lying to me?"

"I did not lie to you."

"You told me," Krisch said furiously, "that there was a negligible time interval between departure and arrival. Why?"

"To me it is negligible."

Krisch saw that it was true. It was his own fault for having phrased the question inadequately,

for having refused to follow up all the implications of the science the Pattern had taught him. The Pattern, he remembered, was not alive, not intelligent, not capable of boredom.

He remembered another line of questioning that he had not followed up, and thought he saw the vague shape of a terrifying possibility.

He said, "When you first came to me, you described yourself as a device to amuse and entertain. Was that the whole truth?"

"You did not ask the whole truth."

"What is the whole truth?"

The Pattern immediately began to recite the history of the race that had made it. Krisch realized venomously that he had asked too sweeping a question, and was about to rephrase it, but the significance of what the Pattern was saying stopped him.

They had been entirely alien, those people; their psychology was incomprehensible to men. They did not fight; they did not explore; they did not rule or exploit; they had nothing that could be identified with human curiosity—that apelike trait that had made humanity what it was. Yet they had a great science. They had acquired it for some motive that Krisch could never grasp.

They had, really, only two characteristics that would be recognizable to men: they loved each other,

their homes, their world; and they had a deep, joyful, ironic sense of humor.

"MEN came," said the Pattern, "eleven million of your years ago. They wanted my makers' world and therefore they killed my makers. My makers knew anguish of flesh and spirit, but they could not fight. Aggressiveness, conflict, were inconceivable to them. But remember that they understood irony. Before the last of them died, they made us as a gift to their destroyers. We were a good gift. We contain all that they knew. We are truthful. We are immortal. We are made to serve.

"It is not our makers' fault," concluded the Pattern, "if men use the knowledge we give them to destroy themselves."

There was only a thin shred left of Krisch's hold on his sanity. He said very carefully, "Did your makers foresee the situation I am in?"

"Yes."

"Is there any way for me to escape from it?"

The Pattern said, "Yes. It is the final jest of my makers. To travel in hyperspace, you must become what I am—only a pattern of forces and memory, not alive, not intelligent, not capable of boredom. I can make this alteration, if you request

it. It is simple, like the growth of one crystal from another, or like the transfer of pattern in living cells."

Krisch choked. He said, "Will I remember?"

"You will have your own memories in addition to those I give you. But you will not retain your human character; you will not be aggressive, or cruel, or egotistic, or curious. You will be a device for answering questions."

Krisch's mind revolted against the thought. But he looked at the dial of his airmaker, and knew what his answer would be. In a flash of prophetic insight, he knew what would happen thereafter. He would finish his journey to Cynara. He would tell the truth, and the truth would corrupt.

Wherever there were men, throughout the universe and to the end of time, his influence would follow them. Eventually, there would be other unwary seekers of knowledge who would take the path he had taken.

By choosing this way out, he would inevitably become mankind's executioner.

But when had men hesitated to risk the survival of the race for their own advantage?

"All right," Krisch said. "The pattern is clear."

—DAMON KNIGHT

• A GENUINE DISCOVERY . . .

ANGEL'S EGG by Edgar Pangborn

A new writer with a new way of telling a new story. . . .

Don't miss this fine novelet next month!

YOUR MONEY BACK!



IF THIS ISN'T
the SIGN of GOOD

SCIENCE FICTION!

Check the list of
outstanding books
below, examine
them for 10 days.
If you're not de-
lighted, return them
for full refund.

SEND NO MONEY NOW!

Choose exciting reading from the
very latest books published.

TYPEWRITER IN THE SKY & FEAR Two great novels in one book! by L. RON HUBBARD	\$2.75
RENAISSANCE Human life on two worlds. by RAYMOND F. JONES	\$2.75
SEVEN SHIP The mystery of a new force. by WILL STEWART	\$2.75

Two Exceptional Anthologies JOURNEY TO INFINITY

The imaginative stories of mankind from
the past to distant future. "Exceptionally
good" says *Editor's Digest*. A descriptive volume. \$2.95

MEN AGAINST THE STARS

A dozen stories tracing man's struggle to
travel to the stars. "Far best anthology in
the genre" says *Editor's Digest*. A bargain at \$2.95.

1. ROBOT

Men and robots in the future.
by **ISAAC ASIMOV** **\$2.50**

CONAN THE CONQUEROR

The famous barbarian-warrior.
by **ROBERT E. HOWARD** **\$2.75**

COSMIC ENGINEERS

Advent on the edge of space.
by **CLIFFORD D. SIMAK** **\$2.50**

MONEY-BACK GUARANTEE!

JUST MAIL THIS COUPON OR A COPY.

GNOME PRESS, Inc.

30 East 11th Street, New York 3

Please send me the attached list of books
amounting to \$_____. I will deposit
this amount plus a few cents postage with
order. If, after 10 days, I am not
delighted, I may return the book or books for
refund of purchase price in 10 days.

NAME _____

ADDRESS _____

CITY _____ ZONE _____ STATE _____

☐ RATE C. O. D. POSTAGE CHARGES.
Check box and enclose payment.
Refund refund postage.

Over twenty
spine-tingling stories
representing the best
in science-fiction

Possible Worlds of Science Fiction

Edited by **GROFF CONKLIN**

Groff Conklin is the editor
of three of the most popular
science-fiction anthologies.
In this new value-packed
volume he has collected over
twenty stories from science-
fiction magazines—none of
which have appeared in book
form before. The stories are
by A. E. Van Vogt, Ray Brad-
bury, Isaac Asimov, Robert
Heinlein, Murray Leinster,
Hal Clement, Theodore
Sturgeon, Clifford Simak,
and many others. At all
bookstores. 384 pages. \$2.95

THE VANGUARD PRESS

424 Madison Avenue
New York 17,

**MEDICAL
DOCTOR says:**



**It's FUN
to REDUCE
with KELPIDINE
CHEWING GUM!**

- NO DRUGS
- NO STARVING
- NO MASSAGE
- NO EXERCISE
- NO STEAMING
- NO LAXATIVES

FREE!

A full 30-day package will be given FREE with a 50-day supply for \$2.95. That's actually a 78-day supply for only \$2.95.

**KELPIDINE CHEWING GUM
\$3.00 FOR MEN, TOO**

**"FAT MEN & WOMEN
who are normally overweight, will be amazed to
discover this safe, pleasant, scientific way to lose ugly
fat and get a slimmer, more attractive figure."**

CHEW IMPROVED FORMULA KELPIDINE CHEWING GUM REDUCE

**UP
TO 5 lbs. A WEEK
With Dr. PHILLIPS REDUCING PLAN**

It's time you or loved one started REDUCING NOW! The amazing, pleasant-tasting chewing gum may be called *Reduce* you lose ugly fat and take all weight without headaches. It's the scientific, safe way to lose up to 5 lbs. a week. Best of all, with Dr. PHILLIPS REDUCING CHEWING GUM KELPIDINE PLAN you can 2 starve, and discomfort, muscle cramps, etc., and only reduce your own fatness by taking a 100mg. chew, you also receive 100mg. of *Reduce*, which provides all the fat-burning action without the side effects of *Reduce*. *Reduce* is a wonderful fat-burner. It allows you to eat, drink, and sleep as usual, yet it will reduce your fat, which takes you back right fat and reduce weight.

LOSE 10 - 20 - 30 LBS.

How will women throughout our land be much lighter as they wish about they also received this amazing scientific way to reduce. You can take all fat-burners in, and you eat 2 starve, and discomfort, muscle cramps, etc. It's really *Reduce* is *Reduce* with the Dr. PHILLIPS REDUCING CHEWING GUM KELPIDINE PLAN. They were kind of any other gum - reduce where you can lose pounds and inches and have fun doing it. Don't just stick to a common sense attractive figure. You can easily reduce to a beautiful, slim, glowing figure, which will give you extra, like new friends, romance and popularity. Don't lose weight! Reduce your own fatness by taking a 100mg. chew 10 days daily or 100mg. *Reduce* KELPIDINE KIDNEY PLAN, and Dr. PHILLIPS REDUCING PLAN the very minute, 100% guaranteed.

You may lose weight ... up to 5 lbs. a week ... or 100 *Reduce* just one *Reduce*, *Reduce* ... your *Reduce* ... and you *Reduce* must tell you that you have lost up to 100 *Reduce* weight, in your money back. What can you lose but unwanted pounds and inches, or you the *Reduce* right away.

**35 Day
Supply
Only.**

\$2.⁹⁵

Money-Back Guarantee! 10 Day Free Trial

Send the coupon card for our amazing Dr. PHILLIPS REDUCING CHEWING GUM KELPIDINE PLAN for 10 days or no charge. If after 10 days you *Reduce*, you *Reduce* and you *Reduce* do not tell you that you have lost weight and look slimmer, you pay nothing.

SENT ON APPROVAL - MAIL COUPON NOW!

AMERICAN HEADPHONES COMPANY, Dept. GH-217
214 Market Street, Newark, N. J.

Send me your name and address, and 10-day card, check or money order. You will receive a 10-day supply of REDUCING CHEWING GUM KELPIDINE PLAN, and Dr. PHILLIPS REDUCING PLAN postage prepaid.

Name

Address

City

State

☐ Send me Supply for 35 days and \$2.95 plus postage for \$2.95.

I understand that if I am not delighted with REDUCING CHEWING GUM and Dr. PHILLIPS REDUCING PLAN, I can return it 10 days for full postage price refunded.

LOSE WEIGHT OR NO CHARGE

HOW TO GET THE MOST FROM THIS



H. G. Wells' Science Fiction Bargain!

7 of the most popular Science Fiction novels by H. G. Wells, now on in one GIANT volume! 10-day FREE TRIAL.

More than 50 hours of exciting, fascinating, thrilling which would cost more than \$30 if purchased separately. Cost yours for only 10 days this amazing offer lasts!

READ THIS BOOK FREE FOR TEN DAYS! See why R.F. could never consider these exciting stories legs in imagination and adventure. You will be excited at the greatest writings of these words remember the fame caused by these Wells' descriptions of War of the Worlds!, Great Conclusions! has written "These tales still lead the field for sheer originality and readability. It's a pleasure to recommend one of the great masters of the genre." John W. Campbell, Jr., said "His novels are the classic key-stones of modern science fiction."

Enjoy this book for 10 days without risk. No club to join! No obligation! If for any reason you do not wish to keep your copy, return it for full and immediate cash refund! This handsomely bound volume with 2-color illustrated jacket will be a beautiful addition to your permanent library.

LOOK AT THESE TITLES:

The War of the Worlds (Earth's reaction to a Martian invasion) • The First Men in the Moon (First scientifically conceived space novel) • In the Days of the Comet (strange green comet disrupts Earth's modern government, nation and love making) • The Invisible Man (showcase you had the power of invisibility. Would you be accepted as a king or idiot?) • The Food of the Gods (fantasy-like children threaten to destroy world) • The

Island of Dr. Moreau (After centuries and ages mankind has been changed into "beasts") • The Time Machine (Foretelling of all fourth-dimensional R.F. novels)

\$3.50 for all 7 complete and unabridged titles, paper, 316 pp., 6 1/2" x 9 1/2" Weight about 2 1/2 lbs.



SEND NO MONEY— Because of rising paper costs we can't guarantee this low price for long, so **MAIL COUPON TODAY!**

DOVER PUBLICATIONS, Inc., 33
150 Broadway, New York 18, N. Y.

Please send me _____ copies of 7 SCIENCE FICTION NOVELS BY H. G. WELLS. I will pay nothing \$3.50 per copy, plus C. O. D. (check) — I may return copies for refund of my share price in 10 days if book fails to meet with my full approval.

NAME _____

ADDRESS _____

_____. Check here if payment enclosed. In this case, transportation to you, 10 day cash-back guarantee of course.

I'VE GOT THEM ALL! EVERY ONE!

All the Science Fiction, Fantasy and Supernatural Books in Print in America or England! I can supply anything you are mentioned, listed or offered anywhere! Visit my store and inspect the Largest Variety of Brand New Books of 1915 kind in the World or send \$50 for my Big Printed Checklist of 224 Titles including 104 Paperback Books at \$24 each copy.

FRANK A. SCHMID

2 Columbia Circle, New York 18, N. Y.

ENRICHED READING

► GALAXY Science Fiction contains the finest plot ingredients . . . carefully selected from thought-ripened ideas . . . and blended by master craftsmen into intellectually and emotionally nutritious stories.

► Twelve issues of GALAXY will supply your minimum annual requirements for mature, believable science fiction.

► The price is \$3.50 and the address is . . .

WORLD EDITIONS, Inc.

105 West 40th Street

New York 18, N. Y.

The Current GALAXY Science Fiction Novel...

THE AMPHIBIANS

by

S. Fowler Wright

☛ A masterpiece by a master of science fiction, this is the story of Earth's inconceivably remote future ...a world as strangely different from ours as ours is from the world of dinosaurs!

☛ Into this world goes the Time Traveler, a man of our era—a barbaric alien in comparison with the possessors of a science vastly superior to ours—accompanied by the enigmatically fascinating Amphibian Woman.

☛ In the Time Traveler's challenge to the Dwellers, giants both in body and mind, and his adventures in this alien life of ages yet to come, the reader will find an invitation to one of the greatest quests in all science fiction!

* * * * *

\$1.50 a year (six issues)

25¢ at your newsstand

or to . . .

WORLD EDITIONS, INC.

105 West 40th Street

New York 18, N. Y.

outstanding books from the leading authors

THINK OF

S H A S T A



when you think of

SCIENCE-FICTION


5525 South Blackstone

Chicago 37

FREE — ILLUSTRATED — SPECTACULAR

Just send a postcard
for

Shasta's catalogue of new and forthcoming titles



Education OF A FRENCH MODEL

ERNEST HEMINGWAY *Introduces* KIKI

—during French model—whose revelations excited all Europe. "A woman who, as far as I know, never had a room of her own," he says of her. But what else does a woman need if she has charm? And if she can find a man for every strange whim of hers?

150 pages, more than 50 photographs, French and American printing. This much wanted-for book, now

ONLY
\$2.98

CONTINENTAL BOOKS

\$2.98

110 Lafayette St., New York 13

Customer: I enclose \$2.98 for my complete copy of THE EDUCATION OF A FRENCH MODEL.

I may return it for full credit if it does not delight me.

NAME _____

ADDRESS _____

CITY _____ STATE _____

☐ Send 1948 1 volume \$4 and \$10 per volume to foreign